<u>Sunday 29 September</u> | <u>Monday 30 September</u> | <u>Tuesday 1 October</u> | <u>Wednesday 2 October</u> | <u>Thursday 3 October</u> | <u>Friday 4 October</u>

Time	SUNDAY 29 SEPTEMBER				
	4.00pm - REGISTRATION				
5.00pm - 7.00pm - WELCOME DRINKS - Student Union Heath/Holt					
6pm V	Rooms Velcome Address by David Yeates "Blowies, Mossies and the Great				
	Aussie Salute"				

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Time	MONDAY 30 SEPTEMBER		
8.00 -	REGISTRATION		
9.00- 9.30	WELCOME and OPENING ADDRESS - Steele Building Room 206 Welcome by David Yeates (Chair) Welcome to University of Queensland by Professor David Siddle (Deputy Vice-Chancellor (Research), University of Queensland) Geoff Garrett (CEO, CSIRO)		
9.30- 10.30	SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry, with Emphasis on Diptera (Chair: Mike Irwin) The influence of modern innovations on systematic inquiry, with emphasis on Diptera Michael Irwin Phylogenetic assessment: the advent of the Hennigian Philosophy Rudolf Meier Molecular biology: a set of new characters for phylogenetic assessment Brian Wiegmann Modern innovations in systematic inquiry Christine Lambkin		
10.30- 11.00			
11.00- 12.30	Bioinformatics and the manipulation of biological information Jim Croft		
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00			
	Diptera: a lot of flies yet to be discovered Chris Thompson	An overview of Horn Fly (Diptera: Muscidae) resistance surveys and research programs in the United States Fred Knapp	

RAM to rammed earth: a perspective from UNESCO Ian Cresswell

Concluding remarks, questions and discussion: Panel of Speakers David Yeates

2.15pm SYMPOSIUM - Diptera in Biodiversity and Conservation 1

Guild analyses in the study of dipteran biodiversity; a rationale and critique Roger Kitching

Diptera diversity on tree trunks Daniel Bickel

Australian glowworms (Diptera: Keroplatidae: Arachnocampa Spp.): identity, diversity, and management Claire Baker

Discovering and managing the patterns of life - from Field surveys of insecticide resistance in Australian buffalo fly Haematobia irritans exigua De Meijere (Diptera: Muscidae) Bill Farnsworth

> A summary of studies on the economic impact of horn flies Jerry Hogsette

Management and resistance of horn fly and buffalo fly: diagnostic techniques for metabolic resistance John Pruett

Management and resistance of horn fly and buffalo fly: diagnostic techniques for target site resistance Felix Guerrero

Movement of horn flies among cattle herds Ronnie **Bvford**

3.00-**REFRESHMENTS - Student Union** 3.30

3.30-SYMPOSIUM - Diptera in 5.00 **Biodiversity and Conservation** Steele Building Room 206

(Chair: Dan Bickel)

Antler flies (Phytalmia, Tephritidae) are fascinating, but not bioindicators Gary Dodson

Sedges, mud and myriads of flies: the brachyceran fauna of sedge meadows in southern Canada Frederic Beaulieu

Chironomid communities (Diptera, Chironomidae) in cold alpine springs. Prospect for a long-term biomonitoring Elisabeth Stur

The dipteran fauna of a Central European mountain stream Ruediger Wagner

The method of the evaluation of antropogenic changes in the environment by means of the family Chloropidae (Diptera).

Stepan Kubik

Habitat modification and dipteran biodiversity in central New Zealand

Ian Andrew

Biodiversity patterns in Neotropical dolichopodid faunas (Diptera: Dolichopodidae) Marc Pollet

Status and geographical distribution of three endangered Karelian keroplatids (Diptera: Keroplatidae) Dimitri Bartenev

WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)

Behaviour-modifying systems for the control of buffalo fly, Haematobia irritans exigua de Meijere (Diptera: Muscidae)

Rudolf Urech

Control of the horn fly and buffalo fly - past, present and future chemistries and strategies John Riner

The use of endectocides for horn fly control **James Hawkins**

Strategies for managing horn fly, Haematobia irritans, resistance Lane Foil

WORKSHOP - Sciomyzidae Steele Building Room 324 (Chair: Lloyd Knutson)

The struggle over reconstructing the phylogenetic relationships of the Sciomyzoidea (Diptera) Rudolf Meier

Morphodiversity and biodiversity in Sepedon Latreille and related genera: a lineage, a tribe, or a subfamily? (Diptera: Sciomyzidae) Lloyd Knutson

Sepedon knutsoni, a second oligochaete feeding sciomyzid from Africa Jean-Claude Vala

Predation and trail-following behaviour in selected marsh fly species (Diptera: Sciomyzidae) Rory Mc Donnell

REGISTRATION PLENARY SPEAKER - Steele Building Room 206 Phylogenetic relationships of nematocerous Diptera: synopsis of recent hypotheses Greg Co	2020		Stil International Di	pterology Conference	
PLENARY SPEAKER - Steele Building Room 206 Phylogenetic relationships of nematocerous Diptera: synopsis of recent hypotheses Greg Co State University (Chair: Marin Wood)	Time		TUESDAY 1	OCTOBER	
Phylogenetic relationships of nematocerous Diptera: synopsis of recent hypotheses Greg Co	3.00 -	REGISTRATION			
State University (Chair: Monty Wood) 3.00- SYMPOSTUM - Multiple Data Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann)	2 10	PLENARY SPEAKER - Steele Building Room 206			
Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann)		Phylogenetic relationships of nematocerous Diptera: synopsis of recent hypotheses <u>Greg Courtney</u> , <i>Iowa State University</i> (Chair: Monty Wood)			
A genomic approach to phylogenetics: multiple gene systematics of the Drosophilidae Patrick O'Grady O'Grady Significant incongruence can be informative: insights from partitioned support analyses Christine Lambkin Genes, fossils and morphology: combined data analysis and a revised time scale for higher-level phylogeny of the Brachycera Brian Wiegmann Molecular and morphological evidence supporting relationships within Eremoneura: focus on Cyclorrhapha Jeff Skevington Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206 Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela More productive tract in Diptera I: an introduction Marion Kotrba The female reproductive tract in Diptera II: an introduction Marion Kotrba The female reproductive tract in Diptera II: an introduction Marion Kotrba The female reproductive tract in Diptera II: an introduction Marion Kotrba The female reproductive tract in Diptera II: an introduction Marion Kotrba The female reproductive tract in Diptera II: an introduction Marion Kotrba The female reproductive tract in Diptera II: an introduction Marion Kotrba The female remating, operational sex ratio, and the area of sexual selection Therese Markow The ladyrinth explored: female sperm storage organs, related structures, and		Set Analyses for Dipteran Phylogenetics Steele Building Room 206	Dipteran Competiton, Cryptic Female Choice and tics Mating Behaviour in Diptera Steele Building Room 309		WORKSHOP - Muscidae Anthomyiidae Steel Building Room 32 (Chair: Adrian Pont)
phylogenetics: multiple gene systematics of the Drosophilidae Patrick O'Grady Significant incongruence can be informative: insights from partitioned support analyses Christine Lambkin Genes, fossils and morphology: combined data analysis and a revised time scale for higher-level phylogeny of the Brachycera Brian Wiegmann Molecular and morphological evidence supporting relationships within Eremoneura: focus on Cyclorrhapha Jeff Skevington Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Rudolf Meier) Steele Building Room 206 Multiple data sets and Syrphid phylogenetics Gunilla Stahls-Makela WORKSHOP - Muscidae, And Stahls-Makela Acadistic The female reproductive tract in Diptera in Diptera in acaly portation and acutive tract in acalyptrate Schizophora (Arthomy Marion Kotrba The female reproductive tract in Diptera in Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206 Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela		,			Diversity and taxonomy of
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Genes, fossils and morphology: combined data analysis and a revised time scale for higher-level phylogener of the Brachycera Brian Wiegmann Molecular and morphological evidence supporting relationships within Eremoneura: focus on Cyclorrhapha Jeff Skevington Multiple data sets in addressing complex evolutionary questions within Empidoidea and Simuliidae John Moulton In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd Non-antagonistic reproductive interactions between the sexes: offsetting the load of sexual conflict Cacey Knowles Muscidae Neotropic taxonomy groups CI: Am Singh Mon-antagonistic reproductive interactions between the sexes: offsetting the load of sexual conflict Cacey Knowles A molecular the Stome on cytochic (Presenter Rosanna		be informative: insights from partitioned support analyses	Female remating, opera	Female remating, operational sex ratio, and the arena of sexual selection Therese Markow	
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Molecular and morphological evidence supporting relationships within Eremoneura: focus on Cyclorrhapha Jeff Skevington Multiple data sets in addressing complex evolutionary questions within Empidoidea and Simuliidae John Moulton In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd 10.30- REFRESHMENTS - Student Union SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206 Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela Muscidae Neotropica taxonomy groups M: A molecular the Sexual Conflict Acromomy groups M: A molecular the Stome on cytochic (Presented Rosanna) Muscidae Neotropica taxonomy groups M: A molecular the Stome on cytochic the Stome on cytochic (Presented Rosanna) A molecular the John Multiple Standard Redividence in Biodiversity and Conservation 3 (Chair: Adrian Poil Steele Building Room 206) Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela		phylogeny of the Brachycera			Muscidae (Diptera) of the Neotropical Region: taxonomy of the basal groups Claudio Carvalho
Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd 10.30- 11.00- 12.30 SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206 Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela		evidence supporting relationships within Eremoneura: focus on			Muscidae (Diptera) of the Neotropical Region - taxonomy of the apical groups M ‡rcia Couri
Conflict or congruence? Darlene Judd		Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton In search of an outgroup for			A molecular phylogeny of the <i>Stomoxys</i> group based on cytochrome oxidase I. (Presented by Adrian Pont Rosanna Giordano
SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206 Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela Phylogeny of the genus Thricops Romann Muscidae) based on molecular and evidence. Jade Savage		conflict or congruence?			
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Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206 Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela Phylogeny of the genus Thricops Roman Muscidae) based on molecular and evidence. Jade Savage		Dipteran Phylogeneti (<i>Chair: Brian Wi</i>	ics (continued)	Steele Buil	ding Room 324
Stahls-Makela Muscidae) based on molecular and evidence. Jade Savage		SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier)			
		Multiple data sets and syrphid phylogenetics Gunilla		Muscidae) based on mol evidence. Jade Savage	ecular and morphological
basis of morphological and molecular characters Heikki Hippa Region - a preliminary approach CI		basis of morphological and molecular characters Heikki			

Combining molecular and morphological data for Comparison of the cuticular hydrocarbons of 7 Sepsidae, Coelopidae, and Diopsidae: More conflict than Musca spp. worldwide (Diptera: Muscidae) David congruence Rudolf Meier Carlson Phylogeny of the small headed-flies (Diptera: Acroceridae) using multiple molecular markers **Shaun** Winterton 15 minute break before start of next session SYMPOSIUM - Diptera in Biodiversity and **Conservation 3** An estimate of dipteran species- richness in Australia **David Yeates** 12.30-LUNCH - Student Union 1.30 1.30-**WORKSHOP - Management of Tephritidae** SYMPOSIUM - Diptera in **WORKSHOP** -3.00 **Biodiversity and** Steele Building room 309 Systematics and Ecology **Conservation 3** (Chair: Dick Drew) of Oestroidea + Steele Building Room 206 Hippoboscoidea (Chair: Rudolf Meier) Steele Building Room 324 (Chair: James O'Hara) Nearctic Diptera: what we Antlered Flies (Tephritidae: Phytalmia) of New Advances in the know and what we do not Guinea and Australia Gary Dodson phylogenetics of the Chris Thompson Tachininae (Tachinidae) Sexual selection in a tropical fruit fly: role of a James O'Hara The Afrotropical Diptera - an plant derived chemical in mate choice S Raghu overview Brian Stuckenberg A review of New World Geographical distribution and seasonal Zaira Robineau-Desvoidy Neotropical Diptera abundance of pest fruit flies in Papua New (Diptera; Tachinidae; Guinea David Putulan biodiversity: an overview Blondeliini) **Dan Hansen Dalton De Souza Amorim** Polytene chromosome analysis, esterase Louse-flies (Diptera: Dipteran biodiversity of the isozyme and Larval Serum Protein (LSP) Hippoboscidae) in the Gal‡pagos Islands (Ecuador) banding patterns in the melon fly Bactrocera Central Black Soil Region of **Bradley Sinclair** cucurbitae Coq. (Diptera: Tephritidae) with Russia Sergey Gaponov reference to irradiation treatment Farzana Hawaii as a Diptera Yesmin biodiversity Hot Spot: a helluva lot of halteres in the Hawaiian Islands **Neal Evenhuis** New Zealand Diptera: diversity and scope for further studies Rod Macfarlane 3.00-**REFRESHMENTS - Student Union** 3.30 3.30-**SYMPOSIUM - Diptera in Biodiversity and WORKSHOP - Agromyzidae** 5.00 Steele Building Room 309 **Conservation 4** Steele Building Room 206 (Chair: David Henshaw) (Chair: Dan Bickel) Assessing species richness of Diptera using museum Tribute to Kenneth Spencer collections Frederik Petersen The phylogeny of Agromyzidae inferred from Extrapolating from the observed species richness in a morphological characters Martin Dempewolf revision to its 'true' species diversity. A case study using Euscelidia (Asilidae: Diptera) Torsten Dikow Mine density, parasitism and emergence of the leafminers, *Liriomyza cicerina* (Rondani) and Spectacular diversity in *Cladochaeta* (Drosophilidae): Liriomyza bryoniae (Kalt.) (Diptera: Agromyzidae), anomalous or typical for Neotropical acalyptrate flies? and parasitoids on broad beans in Egypt. Samir El-**David Grimaldi** Serwy

	Why are there so many genera of Chloropidae? Terry Wheeler	Seasonal fluctuations of the wheat leafminer, Agromyza nigrella (Rondani) (Diptera:	
	The diversity of neotropical Micropezidae Steve Marshall	Agromyzidae), and parasitism in Lower and Middle Egypt. Samir El- Serwy	
	Biodiversity studies of Namibian Diptera - a developing country approach Ashley Kirk-Spriggs	Revision of nearctic species of Cerodontha (Cerodontha) (Diptera: Agromyzidae) with additional notes on other subgenera Stephanie Boucher	
		A CD-ROM on Agromyzidae of economic significance Martin Dempewolf	
		Feeding habits and the so called phytophagy of Chloropidae (Diptera) Michael von Tschirnhaus	
7.00		depart from Kings College 6.15pm Coaches	
	depart Woolshed at 10.30pm		

Time	WEDNESDAY 2 OCTOBER		
	PLENARY SPEAKER - Steele Building Room 206 The fossil history of associations between the Diptera and other organisms Conrad Labandeira, Smithsonian Institution (Chair: Brian Stuckenberg)		
09.00- 10.30	CONTRIBUTED PAPERS - Fossils and Biogeography (Chair: Conrad Labandeira) and CONTRIBUTED PAPERS - Evolution and Biology (Chair: Gary Taylor) Steele Building Room 206	CONTRIBUTED PAPERS - Behaviour and Physiolog Steele Building Room 309 (Chair: Gary Dodson)	
	Origin of main evolutionary lineages of the Diptera - fossil evidences Wieslaw Krzeminski	Regulation of bioluminescence in Australian glow-worms David Merritt	
	How recent are the Empidoidea of Baltic amber? Hans Ulrich Amphipacific disjunctions in net-winged midges (Diptera: Blephariceridae) Peter Zwick 15 Minute break before start of next session CONTRIBUTED PAPERS - Evolution and Biology The Fergusoninidae: co-evolution between gall- flies, nematodes and their myrtaceaous hosts. Gary Taylor New Zealand robber flies: phenology and biogeography Rod Macfarlane	Chemical cues regulate oviposition site selection in the midge Chironomus tepperi Skuse (Chironomidae) Mark Stevens Different female ovipositing strategies in tephritid species of the family Tephritidae (Diptera) in Centaurea scabiosa (Asteraceae) - central Europe Judita Kinkorova Flies that attack polymorphic snails on coloured backgrounds: selection for crypsis by a sarcophagid parasitoid of the marine snail Littoraria filosa Steve McKillup	
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	CONTRIBUTED PAPERS - Evolution and Biology Steele Building Room 206 (Chair: Gary Taylor)	WORKSHOP - Cecidomyiidae Steele Building Room 309 (Chair: Junichi Yukawa)	
	Evolution of the sclerotised plant-piercing oviscapt in <i>Thrypticus</i> (Diptera: Dolichopodidae) Daniel Bickel	Facultative competition between two gall-midge species (Cecidomyiidae) on <i>Suaeda monoica</i> (Chenopodiaceae) Netta Dorchin	
	Do Wolbachia infections obscure phylogeographic patterns of the European cherry fruit fly? Markus	Synchronization of gall midge emergence with host plan phenology Junichi Yukawa	

	Riegler Fly pollination and plant breeding systems: are flies good pollinators? Chris Borkent On the natural history and all life-history stages of the only European stalk-eyed fly, Sphyracephala europaea (Diopsidae: Diptera). Mihaly Foldvari The immature stages of soldier-flies (Diptera, Stratiomyidae) in South America - new reports and biodiversity Jose Roberto Pujol Luz Sex, flies and videotape: pollination and sexual deception in the Australian terrestrial orchid Pterostylis Joanna Hamilton Understanding the evolution of insect: microbe associations using Drosophila melangaster whole genome microarrays Elizabeth McGraw	The gall midges (Cecidomyiidae) of Carya (Juglandaceae) in the Nearctic Region Raymond Gagne Pupal characteristics of the Japanese Asphondylia gall midges (Diptera: Cecidomyiidae) and their species identification by DNA sequencing Nami Uechi Morphology and a preliminary phylogenetic analysis of immatures of Neotropical Asphondyliini genera (Diptera: Cecidomyiidae) Dalton De Souza Amorim Inter- and intraspecific comparison among Asteralobia gall midges (Diptera: Cecidomyiidae) on Ilex species (Aquifoliaceae): sympatric vs. allopatric speciation Makoto Tokuda Zoophagous gall midges of the Italian fauna (Diptera: Cecidomyiidae) Mario Solinas	
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00	SYMPOSIUM - Digital Diptera: Fly Identification in the New Millennium Steele Building Room 206 (Chair: Steve Marshall)	CONTRIBUTED PAPERS - Systematics of Simuliidae Steele Building Room 309 (Chair: Sixto Coscarón)	
	Fly identification: crisis, revolution or evolution? Steve Marshall	Do the Neotropical <i>Simulium</i> subgenera constitute a monophyletic taxon? Daniel Rafael Miranda-Esquivel	
	An interactive key to fly families: from Australia to the world! David Yeates	A cladistic definition of <i>Simulium (Ectemnaspis)</i> and <i>S. (Psilopelmia) subgenera</i> (Diptera: Simuliidae) Sixto Coscarón	
	Simplified digital photography for museum work Stephen Gaimari	Systematics of black flies (Diptera: Simuliidae) in Thailand Suwannee Phayuhasena	
	Identification: some basics and their implications for digital solutions Chris Thompson	Taxonomic revision and cladistic analisis of <i>Simulium</i> (<i>Hearlea</i>) Vargas, Martínez Palacios & Díaz Nájera	
	DORSALIS - an interactive key to fruit flies of the <i>Bactrocera (Bactrocera) dorsalis</i> complex Amy Lawson	(Diptera: Simuliidae) Sixto Coscarón	
	Identification of flies (Diptera) and other insects by general audiences using digital technologies: unlimited access to illustrations Riley Nelson		
3.00- 3.30	REFRESHMENTS - Student Union		
3.30- 5.00	CONTRIBUTED PAPERS - Phylogeny of Lower D Steele Building Room 206 (Chair: Brad Sinclain		
	From polyphyly to biogeography of Thereva (Asiloidea: Therevidae) Kevin Holston New molecular and morphological evidence for the phylogenetic placement of <i>Phycini</i> and <i>Xestomyzini</i> (Diptera, Therevidae) Martin Hauser The Exoprosopini, Australia and the world: revelations from systematic studies Christine Lambkin A phylogenetic analysis of Bibionidae Scott Fitzgerald The main clades of Sciaridae (Diptera) Pekka Vilkamaa		
5.00- 6.00	OPEN COUNCIL MEETING Steele Building Roon	206	
6.00- 7.00	HAPPY HOUR - FREE EVENING		

	Time	THURSDAY 3 OCTOBER
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	The Evolution of Segmentation and Boo Sinclair)	<u> </u>	or Cnicago (Cnair: Brad
9.00- 10.30	WORKSHOP - Development (Chair: David Merritt) and SYMPOSIUM - The Genetics of Biological Invasions (Chair George Roderick)	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building 309 (Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology o Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman
	Steele Building Room 206 Evolution of embryonic axis specification in Diptera Urs Schmidt-Ott	The biogeographical relationships of the Acroceridae of Africa, Madagascar and South America Evert Schlinger	Phylogeny of Chrysomyine blow flies Hiromu Kurahas
	Influential Passengers: Inherited Wolbachia infections of insects Scott O'Neill	New insights into the palaeogeography and breakup of Gondwana, and some associated biogeographical topics Brian	Biodiversity of sarcophagid, calliphorid and muscid flies (Diptera) of Sundarbans Biosphere Reserve, India Bhanu Chandra Nandi
	10 Minute break before next Session SYMPOSIUM - The Genetics of Biological Invasions	Stuckenberg African biogeography patterns - an introduction Ashley Kirk-Spriggs	The evolution of ectoparasitism in calliphoric blowflies Jamie Stevens
	Introduction George Roderick Genetic tools for studying invasive Diptera Andrew Bohonak	The distributional patterns for neotropical / afrotropical / autralo-oriental <i>Simulium</i> Latreille (Diptera: Simuliidae) subgenera Daniel Rafael Miranda-Esquivel	Flesh flies (Sarcophagidae) from southern Appalachian mountain summits: rare species, rare sites, and human encroachment Greg
	Tracking the spread of the invasive horn and buffalo flies, <i>Haematobia irritans irritans</i> and <i>H. i. Exigua</i> , using cytochrome oxidase I and <i>Wolbachia</i> Rosanna Giordano (Presented by Adrian Pont)	Biogeography of Afrotropical Chironomidae (Diptera) Torbjorn Ekrem The phylogenetic relationships of <i>Archaeochlus</i> Brundin, <i>Austrochlus</i> Cranston and <i>Afrochlus</i> Freeman (Diptera: Nematocera), basal chironomid genera with a Gondwanan connection Jon Martin	Dahlem Molecular systematics and identification of Australian carrion-breeding blowflies James Wallman
0.30- 1.00	REFRESHMENTS - Student Union		
1.00- 2.30	SYMPOSIUM - The Genetics of Biological Invasions Steele Building Room 206 (Chair: George Roderick)	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building Room 309 Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology of Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman
	Medfly (Ceratitis capitata) bioinvasions of California Giulliano Gasperi Inferring the source of outbreak populations of Queensland fruit fly Stuart Gilchrist	The present state of taxonomy and biogeography of the Heleomyzidae and Trixoscelididae in the Afrotropical Region. A.J. Woznica (Presented by Ashley Kirk-Spriggs)	Sarcophaga megafilosia and S. meiofilosia: flesh fly parasitoids of marine snails Central Queensland mangroves Thomas Pape
	Diptera invasions in South Pacific islands: consequences for public health Neil Davies	Zoogeographical distribution of Afrotropical species of <i>Atherigona</i> Rondani (Diptera: Muscidae) Michael Chidoze Dike	The joint post feeding radia larval dispersal in flies of genus <i>Chrysomya</i> : weight, depth and distance for
	Are flies model insect invaders? Genetics, ecology, behavior, and	Southern African Empidoidea (Diptera): phylogenetic patterns and biogeographic implications Bradley	pupation Leonardo Gome s
	adaptation George Roderick	Sinclair	

		diverse group of flies Neal Evenhuis	
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00	CONTRIBUTED PAPERS - Phylogeny of Cyclorrhapha Steel Building Room 206 (Chair: Christine Lambkin)	CONTRIBUTED PAPERS - Systematics of Lower Diptera Steel Building Room 309 (Chair: Greg Courtney)	WORKSHOP - Empidoidea Steel Building Room 324 (Marc Pollett)
	The main clades of the Sphaeroceridae (Diptera) Natalia Kuznetzova Stirring the classification of Sphaeroceroidea or Heteromyzoidea David McAlpine Relationships and limits of the Pyrgotidae (Diptera: Schizophora: Tephritoidea) Valery Korneyev Aiming for a phylogenetic classification of the Lauxanioidea Stephen Gaimari Towards a phylogenetic classification of Syrphidae (Diptera) Sergey Kuznetzov	A re-examination of the 'Chaoboriform' genera (Diptera: Chaoboridae) using larval morphological characters Joshua Ogawa The position of the subfamily Bruchomyiinae in the family Psychodidae Ruediger Wagner Austrochironomus, a subgenus of Chironomus Meigen (Diptera: Chironomidae) Masaru Yamamoto Towards a phylogeny of Tanytarsus van der Wulp. Is morphology alone sufficient to reconstruct the genealogical relationships between species in Chironomidae? Torbjorn Ekrem Revision of Wyeomyia (Hystatomyia) Dyar & Knab (Diptera: Culicidae) Jessica Adkins	Dolichopodidae in the canopy of lowland primary rainforest on the north coast of Papua New Guinea Patrick Grootaert Species groups within the genus Hilara (Empididae) in New Zealand Ian Andrew The ultrastructure and function of the silk-producing basitarsus in the Hilarini (Diptera: Empididae) James Young A new species of Nemedina Chandler from mid-Asia (Diptera: Empidoidea) resolves the phylogenetic position of this enigmatic genus Bradley Sinclair Systematics of Nearctic Platypalpus Macquart (Empidoidea: Tachydromiinae) Jeffrey
3.00- 3.30	REFRESHMENTS - Student Union		Cumming
3.30- 5.00	CONTRIBUTED PAPERS - Systematics of Eremoneura Steel Building Room 206 (Chair: Margaret Schneider)	CONTRIBUTED PAPERS - General Medical and Veterinary Entomology Steel Building Room 309 (Chair: Marlene Elson-Harris)	WORKSHOP - Empidoidea Steel Building Room 309 (Chair: Marc Pollett)
	Recent advances in the study of the Asteiidae Amnon Freidberg A new look at the Milichiidae, and a revision of Litometopa Sabrosky (Diptera, Schizophora) Irina Brake Cladistic analysis of the genus Ceratitis MacLeay (Diptera, Tephritidae) Marc De Meyer A revision of Asilostoma Hendel, 1925 (Diptera, Lauxaniidae) Vera Cristina Silva Taxonomic revision of the Afrotropical species of the Eudorylini (Diptera: Pipunculidae) with discussion on special male genital characters Mihaly Foldvari	Biology and ecology of sand flies in new Z.C.L. foci in Semnan province, Iran Hadi Vatani New World screwworm sex pheromone: isolation and synthesis David Carlson Risk-spreading larviposition behaviour of nasopharyngeal Cephenemyia (Diptera:Oestridae) parasites of deer John Anderson Host specific oestrids of deer repelled by non-host odours John Anderson Ecology of sandflies in the main central foci of zoonotic cutaneous leishmaniasis of Iran Yaghoobi-Ershadi	Phylogenetic relationships within the Empidinae (Empididae) Christophé Daugeron The world fauna of Rhamphomyia (Megacyttarus) Miroslav Bartak Preliminary results of a revision of the Neotropical Neurigoninae (Dolichopodidae) Stefan Naglis Cladistic relationships of the subfamily Dolichopodinae Scott Brooks An overview of recent ecological research on

New concepts of Conopinae (Diptera: Conopidae) Margaret Schneider	Biological and natural control of African schistosomiasis host snails by predatory sciomyzid fly larvae Ray Miller	Dolichopodidae in Flanders (Belgium) Marc Pollet
	Studies on the anti-bloodsucking measure against <i>Hirosia iyoensis</i> (Tabanidae) by tracking methods Mamoru Watanabe	
CONFERENCE DINNER ON RIVER QUEEN Coaches Depart Kings College at 6.15pm Coaches Depart River Queen at 10.30pm		

Time	FRIDAY 4 OCTOBER		
8.10- 8.50	PLENARY SPEAKER - Steele Building Room 206 Mosquito-borne disease in Australia - an increasing concern? Richard Russell, University of Sydney (Chair: Scott O'Neill)		
09.00- 10.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes Steele Building Room 206 (Chair: Des Foley)	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Molecular identification of Anopheles and Culex mosquitoes Cathy Walton Mosquito control in Brisbane City Mike Muller Induced immunity against haemolymph proteins of Anopheles stephensi: effects on fecundity of mosquito and transmission blocking of malaria parasites Surendra Gakhar Insights into the population structure of the southwest Pacific malaria vector Anopheles farauti 2 (Diptera: Culicidae) by following ribosomal DNA spacer polymorphisms Nigel Beebe Molecular characterisation and species distribution of the Anopheles maculipennis complex in Iran Mehdi Sedaghat Effects of three plant extracts on eggs and larval development of Culex pipiens L. Ahmed Zaitoun	Keynote Address Diptera: Discovery and Dissemination in a Digital Domain (D5) Chris Thompson Embracing specimen-level databases: expectations and anxieties! Michael Irwin Meeting the interrelated challenges of specimen, nomenclature, and literature tracking with Mandala Gail Kampmeier	
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes (continued) (Chair: Des Foley) and CONTRIBUTED PAPERS - Forensic Entomology (Chair: Ian Dadour) Steele Building room 206	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Botanical management of filarial vector, Culex quinquefasciatus Say Kadarkarai Murugan Evaluation of the effect of exposure to tannic acid and the entomopathogenic fungus Beauveria bassiana on the ecological competence of Anopheles stephensi Mohammad Saaid Dayer 10 minute break before start of next session CONTRIBUTED PAPERS - Forensic Entomology A preliminary survey of forensically important Diptera in Victoria, Australia Melanie Archer	Collection management and databasing at the Entomology Department of INBio, Costa Rica. Manuel Zumbado Mining the Dipteran genome: tools and resources from GenBank/EMBL and NCBI Brian Wiegmann Fauna Europaea - the Diptera component Thomas Pape Databasing European Dolichopodidae (Diptera) in the frame of Fauna Europaea Marc Pollet	

	Morphological and molecular identification of forensically important blow fly species (Diptera: Calliphoridae) from Taiwan Shiuh-Feng Shiao Blowflies associated with pig carcasses exposed in different environments and altitudes in Southeastern Brazil. Aricio Linhares The humble maggot in the 21st Century, a compendium of information Ian Dadour	Asilidae database - content, structure and accessibility Torsten Dikow A World catalogue of Pallopteridae (Diptera) Bernhard Merz Catalogue of the Craneflies of the World with a note on the work by C.P. Alexander (author of 11559 cranefly names) Pjotr Oosterbroek
12.45- 1.15	CLOSING CEREMONY, AWARDING OF PRIZES AND INVI	TATION TO NEXT CONGRESS
1.15- 2.15	LUNCH - Student Union	

Information Disclaimer: The speakers, topics and times are correct at the time of publishing. In the event of unforeseen circumstances, the organisers reserve the right to alter or delete items from the Congress Program

<u>Sunday 29 September | Monday 30 September | Tuesday 1 October | Wednesday 2 October | Thursday 3 October | Friday 4 October</u>

SUNDAY 29 SEPTEMBER				
4.00pm - REGISTRATION				
0pm - 7.00pm - WELCOME DRINKS - Student Union Heath/Holt				
Rooms				
Velcome Address by David Yeates "Blowies, Mossies and the Great Aussie Salute"				

Time	MONDAY 30 SEPTEMBER		
8.00 -	REGISTRATION		
9.00- 9.30	WELCOME and OPENING ADDRESS - Steele Building Room 206 Welcome by David Yeates (Chair) Welcome to University of Queensland by Professor David Siddle (Deputy Vice-Chancellor (Research), University of Queensland) Geoff Garrett (CEO, CSIRO)		
9.30- 10.30	SYMPOSIUM - The Influence of Modern Innovat Diptera (<i>Chair: Mike Irwin</i>)	ions on Systematic Inquiry, with Emphasis on	
	The influence of modern innovations on systematic inquiry, with emphasis on Diptera Michael Irwin Phylogenetic assessment: the advent of the Hennigian Philosophy Rudolf Meier Molecular biology: a set of new characters for phylogenetic assessment Brian Wiegmann Modern innovations in systematic inquiry Christine Lambkin		
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	Bioinformatics and the manipulation of biological information Jim Croft Web-based description and identification - what tools do we need? Kevin Thiele Geographical information systems: the spatial patterning of life David Peters Interpreting the fossil record of Diptera: the temporal patterning of life David Grimaldi Interpreting spatio-temporal patterns among select clades of Diptera Evert Schlinger The urgency to make all life known Ian Cresswell		
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00 SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry with Emphasis on Diptera (continued) (Chair: Mike Steel		WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)	
	Diptera: a lot of flies yet to be discovered Chris Thompson	An overview of Horn Fly (Diptera: Muscidae) resistance surveys and research programs in the United States Fred Knapp	

RAM to rammed earth: a perspective from UNESCO Ian Cresswell

Concluding remarks, questions and discussion: Panel of Speakers David Yeates

2.15pm SYMPOSIUM - Diptera in Biodiversity and Conservation 1

Guild analyses in the study of dipteran biodiversity; a rationale and critique Roger Kitching

Diptera diversity on tree trunks Daniel Bickel

Australian glowworms (Diptera: Keroplatidae: Arachnocampa Spp.): identity, diversity, and management Claire Baker

Discovering and managing the patterns of life - from Field surveys of insecticide resistance in Australian buffalo fly Haematobia irritans exigua De Meijere (Diptera: Muscidae) Bill Farnsworth

> A summary of studies on the economic impact of horn flies Jerry Hogsette

Management and resistance of horn fly and buffalo fly: diagnostic techniques for metabolic resistance John Pruett

Management and resistance of horn fly and buffalo fly: diagnostic techniques for target site resistance Felix Guerrero

Movement of horn flies among cattle herds Ronnie **Bvford**

3.00-**REFRESHMENTS - Student Union** 3.30

3.30-SYMPOSIUM - Diptera in 5.00 **Biodiversity and Conservation**

Steele Building Room 206 (Chair: Dan Bickel)

Antler flies (Phytalmia, Tephritidae) are fascinating, but not bioindicators Gary Dodson

Sedges, mud and myriads of flies: the brachyceran fauna of sedge meadows in southern Canada Frederic Beaulieu

Chironomid communities (Diptera, Chironomidae) in cold alpine springs. Prospect for a long-term biomonitoring Elisabeth Stur

The dipteran fauna of a Central European mountain stream Ruediger Wagner

The method of the evaluation of antropogenic changes in the environment by means of the family Chloropidae (Diptera). Stepan Kubik

Habitat modification and dipteran biodiversity in central New Zealand

Ian Andrew

Biodiversity patterns in Neotropical dolichopodid faunas (Diptera: Dolichopodidae) Marc Pollet

Status and geographical distribution of three endangered Karelian keroplatids (Diptera: Keroplatidae) Dimitri Bartenev

WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)

Behaviour-modifying systems for the control of buffalo fly, Haematobia irritans exigua de Meijere (Diptera: Muscidae)

Rudolf Urech

Control of the horn fly and buffalo fly - past, present and future chemistries and strategies John Riner

The use of endectocides for horn fly control **James Hawkins**

Strategies for managing horn fly, Haematobia irritans, resistance Lane Foil

WORKSHOP - Sciomyzidae Steele Building Room 324 (Chair: Lloyd Knutson)

The struggle over reconstructing the phylogenetic relationships of the Sciomyzoidea (Diptera) Rudolf Meier

Morphodiversity and biodiversity in Sepedon Latreille and related genera: a lineage, a tribe, or a subfamily? (Diptera: Sciomyzidae) Lloyd Knutson

Sepedon knutsoni, a second oligochaete feeding sciomyzid from Africa Jean-Claude Vala

Predation and trail-following behaviour in selected marsh fly species (Diptera: Sciomyzidae) Rory Mc Donnell

2020		our international Bij	derology Contenence	
Time		TUESDAY 1	OCTOBER	
3.00 -	REGISTRATION			
5.10-	PLENARY SPEAKER - Steele Building Room 206 Phylogenetic relationships of nematocerous Diptera: synopsis of recent hypotheses Greg Courtney, Iowa State University (Chair: Monty Wood)			
	SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann)	SYMPOSIUM - Sperm Olympics: Sperm Competiton, Cryptic Female Choice and Mating Behaviour in Diptera Steele Building Room 309		WORKSHOP - Muscidae Anthomyiidae Steel Building Room 32 (Chair: Adrian Pont)
	A genomic approach to phylogenetics: multiple gene systematics of the Drosophilidae Patrick O'Grady Significant incongruence can be informative: insights from partitioned support analyses Christine Lambkin Genes, fossils and morphology: combined data analysis and a revised time scale for higher-level phylogeny of the Brachycera Brian Wiegmann Molecular and morphological evidence supporting relationships within Eremoneura: focus on Cyclorrhapha Jeff Skevington Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd	(Chair: Marion Kotrba) The female reproductive tract in Diptera I: an introduction Marion Kotrba The female reproductive tract in Diptera II: morphological diversity and details of the female reproductive tract in acalyptrate Schizophora Marion Kotrba Female remating, operational sex ratio, and the arena of sexual selection Therese Markow The labyrinth explored: female sperm storage organs, related structures, and sperm storage patterns in the tephritid fly, Anastrepha suspensa. Ann Fritz Female remating, sperm displacement, remating speed, fertility, Drosophila ananassae Shree Ram Singh Non-antagonistic reproductive interactions between the sexes: offsetting the load of sexual conflict Lacey Knowles		Diversity and taxonomy of catkin flies (Egle, Anthomyiidae) Graham Griffiths The plumosa group of Hydrophoria (Anthomyiidae) Masaaki Suwa A cladistic analysis of the Muscidae: first results - and problems Adrian Pon Muscidae (Diptera) of the Neotropical Region: taxonomy of the basal groups Claudio Carvalho Muscidae (Diptera) of the Neotropical Region - taxonomy of the apical groups M‡rcia Couri A molecular phylogeny of the Stomoxys group based on cytochrome oxidase I. (Presented by Adrian Pont Rosanna Giordano
10.30- 11.00 11.00-	REFRESHMENTS - Student U		WORKSHOR - MIII	scidae, Anthomyiidae
12.30	SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206		Steele Buil	ding Room 324 Adrian Pont)
	Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela Phylogeny of Syrphinae (Diptera, Syrphidae) on the basis of morphological and molecular characters Heikki Hippa		Muscidae) based on mol evidence. Jade Savage Distributional pattern of	

Combining molecular and morphological data for Comparison of the cuticular hydrocarbons of 7 Sepsidae, Coelopidae, and Diopsidae: More conflict than Musca spp. worldwide (Diptera: Muscidae) David congruence Rudolf Meier Carlson Phylogeny of the small headed-flies (Diptera: Acroceridae) using multiple molecular markers **Shaun** Winterton 15 minute break before start of next session SYMPOSIUM - Diptera in Biodiversity and **Conservation 3** An estimate of dipteran species- richness in Australia **David Yeates** 12.30-LUNCH - Student Union 1.30 1.30-**WORKSHOP - Management of Tephritidae** SYMPOSIUM - Diptera in **WORKSHOP** -3.00 **Biodiversity and** Steele Building room 309 Systematics and Ecology **Conservation 3** (Chair: Dick Drew) of Oestroidea + Steele Building Room 206 Hippoboscoidea (Chair: Rudolf Meier) Steele Building Room 324 (Chair: James O'Hara) Nearctic Diptera: what we Antlered Flies (Tephritidae: Phytalmia) of New Advances in the know and what we do not Guinea and Australia Gary Dodson phylogenetics of the Chris Thompson Tachininae (Tachinidae) Sexual selection in a tropical fruit fly: role of a James O'Hara The Afrotropical Diptera - an plant derived chemical in mate choice S Raghu overview Brian Stuckenberg A review of New World Geographical distribution and seasonal Zaira Robineau-Desvoidy Neotropical Diptera abundance of pest fruit flies in Papua New (Diptera; Tachinidae; Guinea David Putulan biodiversity: an overview Blondeliini) **Dan Hansen Dalton De Souza Amorim** Polytene chromosome analysis, esterase Louse-flies (Diptera: Dipteran biodiversity of the isozyme and Larval Serum Protein (LSP) Hippoboscidae) in the Gal‡pagos Islands (Ecuador) banding patterns in the melon fly Bactrocera Central Black Soil Region of **Bradley Sinclair** cucurbitae Coq. (Diptera: Tephritidae) with Russia Sergey Gaponov reference to irradiation treatment Farzana Hawaii as a Diptera Yesmin biodiversity Hot Spot: a helluva lot of halteres in the Hawaiian Islands **Neal Evenhuis** New Zealand Diptera: diversity and scope for further studies Rod Macfarlane 3.00-**REFRESHMENTS - Student Union** 3.30 3.30-**SYMPOSIUM - Diptera in Biodiversity and WORKSHOP - Agromyzidae** 5.00 Steele Building Room 309 **Conservation 4** Steele Building Room 206 (Chair: David Henshaw) (Chair: Dan Bickel) Assessing species richness of Diptera using museum Tribute to Kenneth Spencer collections Frederik Petersen The phylogeny of Agromyzidae inferred from Extrapolating from the observed species richness in a morphological characters Martin Dempewolf revision to its 'true' species diversity. A case study using Euscelidia (Asilidae: Diptera) Torsten Dikow Mine density, parasitism and emergence of the leafminers, *Liriomyza cicerina* (Rondani) and Spectacular diversity in *Cladochaeta* (Drosophilidae): Liriomyza bryoniae (Kalt.) (Diptera: Agromyzidae), anomalous or typical for Neotropical acalyptrate flies? and parasitoids on broad beans in Egypt. Samir El-**David Grimaldi** Serwy

	Why are there so many genera of Chloropidae? Terry Wheeler	Seasonal fluctuations of the wheat leafminer, Agromyza nigrella (Rondani) (Diptera:
	The diversity of neotropical Micropezidae Steve Marshall	Agromyzidae), and parasitism in Lower and Middle Egypt. Samir El- Serwy
	Biodiversity studies of Namibian Diptera - a developing country approach Ashley Kirk-Spriggs	Revision of nearctic species of Cerodontha (Cerodontha) (Diptera: Agromyzidae) with additional notes on other subgenera Stephanie Boucher
		A CD-ROM on Agromyzidae of economic significance Martin Dempewolf
		Feeding habits and the so called phytophagy of Chloropidae (Diptera) Michael von Tschirnhaus
7.00	DINNER AT AUSTRALIAN WOOLSHED Coaches depart Woolshe	depart from Kings College 6.15pm Coaches d at 10.30pm

Time	WEDNESDAY 2 OCTOBER		
	PLENARY SPEAKER - Steele Building Room 206 The fossil history of associations between the Diptera and other organisms Conrad Labandeira, Smithsonian Institution (Chair: Brian Stuckenberg)		
09.00- 10.30	CONTRIBUTED PAPERS - Fossils and Biogeography (Chair: Conrad Labandeira) and CONTRIBUTED PAPERS - Evolution and Biology (Chair: Gary Taylor) Steele Building Room 206	CONTRIBUTED PAPERS - Behaviour and Physiology Steele Building Room 309 (Chair: Gary Dodson)	
	Origin of main evolutionary lineages of the Diptera - fossil evidences Wieslaw Krzeminski	Regulation of bioluminescence in Australian glow-worms David Merritt	
	How recent are the Empidoidea of Baltic amber? Hans Ulrich	Chemical cues regulate oviposition site selection in the midge <i>Chironomus tepperi</i> Skuse (Chironomidae) Mark Stevens	
	Amphipacific disjunctions in net-winged midges (Diptera: Blephariceridae) Peter Zwick	Different female ovipositing strategies in tephritid species of the family Tephritidae (Diptera) in Centaurea	
	15 Minute break before start of next session	scabiosa (Asteraceae) - central Europe Judita	
	CONTRIBUTED PAPERS - Evolution and Biology	Kinkorova Flies that attack polymorphic snails on coloured	
	The Fergusoninidae: co-evolution between gall- flies, nematodes and their myrtaceaous hosts. Gary Taylor	backgrounds: selection for crypsis by a sarcophagid parasitoid of the marine snail <i>Littoraria filosa</i> Steve McKillup	
	New Zealand robber flies: phenology and biogeography Rod Macfarlane		
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	CONTRIBUTED PAPERS - Evolution and Biology Steele Building Room 206 (Chair: Gary Taylor)	WORKSHOP - Cecidomyiidae Steele Building Room 309 (Chair: Junichi Yukawa)	
	Evolution of the sclerotised plant-piercing oviscapt in <i>Thrypticus</i> (Diptera: Dolichopodidae) Daniel Bickel	Facultative competition between two gall-midge species (Cecidomyiidae) on <i>Suaeda monoica</i> (Chenopodiaceae) Netta Dorchin	
l	Do Wolbachia infections obscure phylogeographic patterns of the European cherry fruit fly? Markus	Synchronization of gall midge emergence with host plan phenology Junichi Yukawa	

12.30-	Riegler Fly pollination and plant breeding systems: are flies good pollinators? Chris Borkent On the natural history and all life-history stages of the only European stalk-eyed fly, Sphyracephala europaea (Diopsidae: Diptera). Mihaly Foldvari The immature stages of soldier-flies (Diptera, Stratiomyidae) in South America - new reports and biodiversity Jose Roberto Pujol Luz Sex, flies and videotape: pollination and sexual deception in the Australian terrestrial orchid Pterostylis Joanna Hamilton Understanding the evolution of insect: microbe associations using Drosophila melangaster whole genome microarrays Elizabeth McGraw	The gall midges (Cecidomyiidae) of Carya (Juglandaceae) in the Nearctic Region Raymond Gagne Pupal characteristics of the Japanese Asphondylia gall midges (Diptera: Cecidomyiidae) and their species identification by DNA sequencing Nami Uechi Morphology and a preliminary phylogenetic analysis of immatures of Neotropical Asphondyliini genera (Diptera: Cecidomyiidae) Dalton De Souza Amorim Inter- and intraspecific comparison among Asteralobia gall midges (Diptera: Cecidomyiidae) on Ilex species (Aquifoliaceae): sympatric vs. allopatric speciation Makoto Tokuda Zoophagous gall midges of the Italian fauna (Diptera: Cecidomyiidae) Mario Solinas	
1.30	LUNCH - Student Union		
1.30- 3.00	SYMPOSIUM - Digital Diptera: Fly Identification in the New Millennium Steele Building Room 206 (Chair: Steve Marshall)	CONTRIBUTED PAPERS - Systematics of Simuliidae Steele Building Room 309 (Chair: Sixto Coscarón)	
	Fly identification: crisis, revolution or evolution? Steve Marshall	Do the Neotropical Simulium subgenera constitute a monophyletic taxon? Daniel Rafael Miranda-Esquivel	
	An interactive key to fly families: from Australia to the world! David Yeates	A cladistic definition of <i>Simulium (Ectemnaspis)</i> and <i>S. (Psilopelmia) subgenera</i> (Diptera: Simuliidae) Sixto Coscarón	
	Simplified digital photography for museum work Stephen Gaimari	Systematics of black flies (Diptera: Simuliidae) in Thailand Suwannee Phayuhasena	
	Identification: some basics and their implications for digital solutions Chris Thompson	Taxonomic revision and cladistic analisis of <i>Simulium</i>	
	DORSALIS - an interactive key to fruit flies of the Bactrocera (Bactrocera) dorsalis complex Amy Lawson	(Hearlea) Vargas, Martínez Palacios & Díaz Nájera (Diptera: Simuliidae) Sixto Coscarón	
	Identification of flies (Diptera) and other insects by general audiences using digital technologies: unlimited access to illustrations Riley Nelson		
3.00- 3.30	REFRESHMENTS - Student Union		
3.30- 5.00	CONTRIBUTED PAPERS - Phylogeny of Lower D Steele Building Room 206 (Chair: Brad Sinclair		
	From polyphyly to biogeography of Thereva (Asiloidea: Therevidae) Kevin Holston New molecular and morphological evidence for the phylogenetic placement of <i>Phycini</i> and <i>Xestomyzini</i> (Diptera, Therevidae) Martin Hauser The Exoprosopini, Australia and the world: revelations from systematic studies Christine Lambkin A phylogenetic analysis of Bibionidae Scott Fitzgerald The main clades of Sciaridae (Diptera) Pekka Vilkamaa		
5.00- 6.00	OPEN COUNCIL MEETING Steele Building Roon	1 206	
6.00- 7.00	HAPPY HOUR - FREE EVENING		

	Time	THURSDAY 3 OCTOBER
1		

.00-	Sinclair) WORKSHOP - Development	CONTRIBUTED PAPERS - African	WORKSHOP - Biology of
10.30	(Chair: David Merritt) and SYMPOSIUM - The Genetics of Biological Invasions (Chair George Roderick) Steele Building Room 206	Diptera: Biogeography and Gondwanaland Steele Building 309 (Chair: Ashley Kirk-Spriggs)	Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman)
	Evolution of embryonic axis specification in Diptera Urs Schmidt-Ott	The biogeographical relationships of the Acroceridae of Africa, Madagascar and South America Evert Schlinger	Phylogeny of Chrysomyine blow flies Hiromu Kurahas Biodiversity of sarcophagid,
	Influential Passengers: Inherited Wolbachia infections of insects Scott O'Neill 10 Minute break before next	New insights into the palaeogeography and breakup of Gondwana, and some associated biogeographical topics Brian	calliphorid and muscid flies (Diptera) of Sundarbans Biosphere Reserve, India Bhanu Chandra Nandi
	Session SYMPOSIUM - The Genetics of Biological Invasions	Stuckenberg African biogeography patterns - an introduction Ashley Kirk-Spriggs	The evolution of ectoparasitism in calliphorion blowflies Jamie Stevens
	Introduction George Roderick	The distributional patterns for neotropical / afrotropical / autralo-	Flesh flies (Sarcophagidae) from southern Appalachian
	Genetic tools for studying invasive Diptera Andrew Bohonak	oriental <i>Simulium</i> Latreille (Diptera: Simuliidae) subgenera Daniel Rafael Miranda-Esquivel	mountain summits: rare species, rare sites, and human encroachment Greg Dahlem
	Tracking the spread of the invasive horn and buffalo flies, Haematobia irritans irritans and H. i. Exigua, using cytochrome oxidase I and Wolbachia Rosanna Giordano (Presented by Adrian Pont)	Biogeography of Afrotropical Chironomidae (Diptera) Torbjorn Ekrem The phylogenetic relationships of <i>Archaeochlus</i> Brundin, <i>Austrochlus</i> Cranston and <i>Afrochlus</i> Freeman (Diptera: Nematocera), basal chironomid genera with a Gondwanan connection Jon Martin	Molecular systematics and identification of Australian carrion-breeding blowflies James Wallman
).30- 00	REFRESHMENTS - Student Union		
11.00- 12.30	SYMPOSIUM - The Genetics of Biological Invasions Steele Building Room 206 (Chair: George Roderick)	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building Room 309 Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology of Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman
	Medfly (Ceratitis capitata) bioinvasions of California Giulliano Gasperi Inferring the source of outbreak populations of Queensland fruit fly Stuart Gilchrist	The present state of taxonomy and biogeography of the Heleomyzidae and Trixoscelididae in the Afrotropical Region. A.J. Woznica (Presented by Ashley Kirk-Spriggs)	Sarcophaga megafilosia and S. meiofilosia: flesh fly parasitoids of marine snails Central Queensland mangroves Thomas Pape
	Diptera invasions in South Pacific islands: consequences for public health Neil Davies	Zoogeographical distribution of Afrotropical species of <i>Atherigona</i> Rondani (Diptera: Muscidae) Michael Chidoze Dike	The joint post feeding radia larval dispersal in flies of genus <i>Chrysomya</i> : weight, depth and distance for pupation Leonardo Gome
	Are flies model insect invaders? Genetics, ecology, behavior, and adaptation George Roderick	Southern African Empidoidea (Diptera): phylogenetic patterns and biogeographic implications Bradley	papation Leonardo Gome.
		Sinclair	

	diverse group of flies Neal Evenhuis			
12.30- 1.30	LUNCH - Student Union			
1.30- 3.00	CONTRIBUTED PAPERS - Phylogeny of Cyclorrhapha Steel Building Room 206 (Chair: Christine Lambkin)	CONTRIBUTED PAPERS - Systematics of Lower Diptera Steel Building Room 309 (Chair: Greg Courtney)	WORKSHOP - Empidoidea Steel Building Room 324 (Marc Pollett)	
	The main clades of the Sphaeroceridae (Diptera) Natalia Kuznetzova Stirring the classification of Sphaeroceroidea or Heteromyzoidea David McAlpine Relationships and limits of the Pyrgotidae (Diptera: Schizophora: Tephritoidea) Valery Korneyev Aiming for a phylogenetic classification of the Lauxanioidea Stephen Gaimari Towards a phylogenetic classification of Syrphidae (Diptera) Sergey Kuznetzov	A re-examination of the 'Chaoboriform' genera (Diptera: Chaoboridae) using larval morphological characters Joshua Ogawa The position of the subfamily Bruchomyiinae in the family Psychodidae Ruediger Wagner Austrochironomus, a subgenus of Chironomus Meigen (Diptera: Chironomidae) Masaru Yamamoto Towards a phylogeny of Tanytarsus van der Wulp. Is morphology alone sufficient to reconstruct the genealogical relationships between species in Chironomidae? Torbjorn Ekrem Revision of Wyeomyia (Hystatomyia) Dyar & Knab (Diptera: Culicidae) Jessica Adkins	Dolichopodidae in the canopy of lowland primary rainforest on the north coast of Papua New Guinea Patrick Grootaert Species groups within the genus Hilara (Empididae) in New Zealand Ian Andrew The ultrastructure and function of the silk-producing basitarsus in the Hilarini (Diptera: Empididae) James Young A new species of Nemedina Chandler from mid-Asia (Diptera: Empidoidea) resolves the phylogenetic position of this enigmatic genus Bradley Sinclair Systematics of Nearctic Platypalpus Macquart (Empidoidea: Tachydromiinae) Jeffrey Cumming	
3.00- 3.30	REFRESHMENTS - Student Union			
3.30- 5.00	CONTRIBUTED PAPERS - Systematics of Eremoneura Steel Building Room 206 (Chair: Margaret Schneider)	CONTRIBUTED PAPERS - General Medical and Veterinary Entomology Steel Building Room 309 (Chair: Marlene Elson-Harris)	WORKSHOP - Empidoidea Steel Building Room 309 (Chair: Marc Pollett)	
	Recent advances in the study of the Asteiidae Amnon Freidberg A new look at the Milichiidae, and a revision of Litometopa Sabrosky (Diptera, Schizophora) Irina Brake Cladistic analysis of the genus Ceratitis MacLeay (Diptera, Tephritidae) Marc De Meyer A revision of Asilostoma Hendel, 1925 (Diptera, Lauxaniidae) Vera Cristina Silva Taxonomic revision of the Afrotropical species of the Eudorylini (Diptera: Pipunculidae) with discussion on special male genital characters Mihaly Foldvari	Biology and ecology of sand flies in new Z.C.L. foci in Semnan province, Iran Hadi Vatani New World screwworm sex pheromone: isolation and synthesis David Carlson Risk-spreading larviposition behaviour of nasopharyngeal Cephenemyia (Diptera:Oestridae) parasites of deer John Anderson Host specific oestrids of deer repelled by non-host odours John Anderson Ecology of sandflies in the main central foci of zoonotic cutaneous leishmaniasis of Iran Yaghoobi-Ershadi	Phylogenetic relationships within the Empidinae (Empididae) Christophé Daugeron The world fauna of Rhamphomyia (Megacyttarus) Miroslav Bartak Preliminary results of a revision of the Neotropical Neurigoninae (Dolichopodidae) Stefan Naglis Cladistic relationships of the subfamily Dolichopodinae Scott Brooks An overview of recent ecological research on	

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New concepts of Conopinae (Diptera: Conopidae) Margaret Schneider	African schistoso predatory sciom Miller Studies on the a measure agains	omiasis host snails by yzid fly larvae Ray anti-bloodsucking the Hirosia iyoensis cracking methods	Dolichopodidae in Flanders (Belgium) Marc Pollet
	CONFERENCE DINNER ON RIVER QUEEN		
Coaches Depart Kings Colle	ege at 6.15pm	Coaches Depart R	liver Queen at 10.30pm

Time	FRIDAY 4 OCTOBER		
8.10- 8.50	PLENARY SPEAKER - Steele Building Room 206 Mosquito-borne disease in Australia - an increasing concern? Richard Russell, University of Sydney (Chair: Scott O'Neill)		
09.00- 10.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes Steele Building Room 206 (Chair: Des Foley)	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Molecular identification of Anopheles and Culex mosquitoes Cathy Walton Mosquito control in Brisbane City Mike Muller Induced immunity against haemolymph proteins of Anopheles stephensi: effects on fecundity of mosquito and transmission blocking of malaria parasites Surendra Gakhar Insights into the population structure of the southwest Pacific malaria vector Anopheles farauti 2 (Diptera: Culicidae) by following ribosomal DNA spacer polymorphisms Nigel Beebe Molecular characterisation and species distribution of the Anopheles maculipennis complex in Iran Mehdi Sedaghat Effects of three plant extracts on eggs and larval development of Culex pipiens L. Ahmed Zaitoun	Keynote Address Diptera: Discovery and Dissemination in a Digital Domain (D5) Chris Thompson Embracing specimen-level databases: expectations and anxieties! Michael Irwin Meeting the interrelated challenges of specimen, nomenclature, and literature tracking with Mandala Gail Kampmeier	
10.30- 11.00	REFRESHMENTS - Student Union		
11.00-12.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes (continued) (Chair: Des Foley) and CONTRIBUTED PAPERS - Forensic Entomology (Chair: Ian Dadour) Steele Building room 206	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Botanical management of filarial vector, Culex quinquefasciatus Say Kadarkarai Murugan Evaluation of the effect of exposure to tannic acid and the entomopathogenic fungus Beauveria bassiana on the ecological competence of Anopheles stephensi Mohammad Saaid Dayer 10 minute break before start of next session CONTRIBUTED PAPERS - Forensic Entomology A preliminary survey of forensically important Diptera in Victoria, Australia Melanie Archer	Collection management and databasing at the Entomology Department of INBio, Costa Rica. Manuel Zumbado Mining the Dipteran genome: tools and resources from GenBank/EMBL and NCBI Brian Wiegmann Fauna Europaea - the Diptera component Thomas Pape Databasing European Dolichopodidae (Diptera) in the frame of Fauna Europaea Marc Pollet	

	Morphological and molecular identification of forensically important blow fly species (Diptera: Calliphoridae) from Taiwan Shiuh-Feng Shiao Blowflies associated with pig carcasses exposed in different environments and altitudes in Southeastern Brazil. Aricio Linhares The humble maggot in the 21st Century, a compendium of information Ian Dadour	Asilidae database - content, structure and accessibility Torsten Dikow A World catalogue of Pallopteridae (Diptera) Bernhard Merz Catalogue of the Craneflies of the World with a note on the work by C.P. Alexander (author of 11559 cranefly names) Pjotr Oosterbroek
12.45- 1.15	CLOSING CEREMONY, AWARDING OF PRIZES AND INVI	TATION TO NEXT CONGRESS
1.15- 2.15	LUNCH - Student Union	

Information Disclaimer: The speakers, topics and times are correct at the time of publishing. In the event of unforeseen circumstances, the organisers reserve the right to alter or delete items from the Congress Program

<u>Sunday 29 September | Monday 30 September | Tuesday 1 October | Wednesday 2 October | Thursday 3 October | Friday 4 October</u>

Time	SUNDAY 29 SEPTEMBER		
	4.00pm - REGISTRATION		
5.00pm - 7.00pm - WELCOME DRINKS - Student Union Heath/Holt			
6pm V	Rooms Velcome Address by David Yeates "Blowies, Mossies and the Great		
	Aussie Salute"		

Time	MONDAY 30 SEPTEMBER		
8.00 -	REGISTRATION		
9.00- 9.30	WELCOME and OPENING ADDRESS - Steele Building Room 206 Welcome by David Yeates (Chair) Welcome to University of Queensland by Professor David Siddle (Deputy Vice-Chancellor (Research), University of Queensland) Geoff Garrett (CEO, CSIRO)		
9.30- 10.30	SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry, with Emphasis on Diptera (<i>Chair: Mike Irwin</i>)		
	The influence of modern innovations on systematic inquiry, with emphasis on Diptera Michael Irwin Phylogenetic assessment: the advent of the Hennigian Philosophy Rudolf Meier Molecular biology: a set of new characters for phylogenetic assessment Brian Wiegmann Modern innovations in systematic inquiry Christine Lambkin		
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	Bioinformatics and the manipulation of biological information Jim Croft Web-based description and identification - what tools do we need? Kevin Thiele Geographical information systems: the spatial patterning of life David Peters Interpreting the fossil record of Diptera: the temporal patterning of life David Grimaldi Interpreting spatio-temporal patterns among select clades of Diptera Evert Schlinger The urgency to make all life known Ian Cresswell		
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00 SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry with Emphasis on Diptera (continued) (Chair: Mike Steele I		WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)	
	Diptera: a lot of flies yet to be discovered Chris Thompson	An overview of Horn Fly (Diptera: Muscidae) resistance surveys and research programs in the United States Fred Knapp	

Discovering and managing the patterns of life - from Field surveys of insecticide resistance in Australian RAM to rammed earth: a perspective from UNESCO Ian Cresswell

Concluding remarks, questions and discussion: Panel of Speakers David Yeates

2.15pm SYMPOSIUM - Diptera in Biodiversity and Conservation 1

Guild analyses in the study of dipteran biodiversity; a rationale and critique Roger Kitching

Diptera diversity on tree trunks Daniel Bickel

Australian glowworms (Diptera: Keroplatidae: Arachnocampa Spp.): identity, diversity, and management Claire Baker

buffalo fly Haematobia irritans exigua De Meijere (Diptera: Muscidae) Bill Farnsworth

A summary of studies on the economic impact of horn flies Jerry Hogsette

Management and resistance of horn fly and buffalo fly: diagnostic techniques for metabolic resistance John Pruett

Management and resistance of horn fly and buffalo fly: diagnostic techniques for target site resistance Felix Guerrero

Movement of horn flies among cattle herds Ronnie **Bvford**

3.00-**REFRESHMENTS - Student Union** 3.30

3.30-SYMPOSIUM - Diptera in 5.00 **Biodiversity and Conservation** Steele Building Room 206

(Chair: Dan Bickel) Antler flies (Phytalmia,

Tephritidae) are fascinating, but not bioindicators Gary Dodson

Sedges, mud and myriads of flies: the brachyceran fauna of sedge meadows in southern Canada Frederic Beaulieu

Chironomid communities (Diptera, Chironomidae) in cold alpine springs. Prospect for a long-term biomonitoring Elisabeth Stur

The dipteran fauna of a Central European mountain stream Ruediger Wagner

The method of the evaluation of antropogenic changes in the environment by means of the family Chloropidae (Diptera). Stepan Kubik

Habitat modification and dipteran biodiversity in central New Zealand Ian Andrew

Biodiversity patterns in Neotropical dolichopodid faunas (Diptera: Dolichopodidae) Marc Pollet

Status and geographical distribution of three endangered Karelian keroplatids (Diptera: Keroplatidae) Dimitri Bartenev

WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)

Behaviour-modifying systems for the control of buffalo fly, Haematobia irritans exigua de Meijere (Diptera: Muscidae)

Rudolf Urech

Control of the horn fly and buffalo fly - past, present and future chemistries and strategies John Riner

The use of endectocides for horn fly control **James Hawkins**

Strategies for managing horn fly, Haematobia irritans, resistance Lane Foil

WORKSHOP - Sciomyzidae Steele Building Room 324 (Chair: Lloyd Knutson)

The struggle over reconstructing the phylogenetic relationships of the Sciomyzoidea (Diptera) Rudolf Meier

Morphodiversity and biodiversity in Sepedon Latreille and related genera: a lineage, a tribe, or a subfamily? (Diptera: Sciomyzidae) Lloyd Knutson

Sepedon knutsoni, a second oligochaete feeding sciomyzid from Africa Jean-Claude Vala

Predation and trail-following behaviour in selected marsh fly species (Diptera: Sciomyzidae) Rory Mc Donnell

2020		5th International Di	pterology Conference		
Time		TUESDAY 1	OCTOBER		
3.00 -	REGISTRATION				
	PLENARY SPEAKER - Steele Building Room 206 Phylogenetic relationships of nematocerous Diptera: synopsis of recent hypotheses Greg Courtney, Iowa State University (Chair: Monty Wood)				
5 EO					
9.00- 10.30	SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann)	SYMPOSIUM - Sperm Olympics: Sperm Competiton, Cryptic Female Choice and Mating Behaviour in Diptera Steele Building Room 309 (Chair: Marion Kotrba)		WORKSHOP - Muscidae Anthomyiidae Steel Building Room 32 (Chair: Adrian Pont)	
	A genomic approach to			Diversity and taxonomy of	
	phylogenetics: multiple gene systematics of the Drosophilidae Patrick	The female reproductive tract in Diptera II: morphological diversity and details of the female reproductive tract in acalyptrate Schizophora Marion Kotrba Female remating, operational sex ratio, and the arena of sexual selection Therese Markow The labyrinth explored: female sperm storage organs, related structures, and sperm storage patterns in the tephritid fly, Anastrepha suspensa. Ann Fritz Female remating, sperm displacement, remating speed, fertility, Drosophila ananassae Shree Ram Singh Non-antagonistic reproductive interactions between the sexes: offsetting the load of sexual conflict Lacey Knowles		catkin flies (Egle, Anthomyiidae) Graham Griffiths	
	O'Grady Significant incongruence can be informative: insights from			The plumosa group of Hydrophoria (Anthomyiidae) Masaaki	
	partitioned support analyses Christine Lambkin			Suwa A cladistic analysis of the	
	Genes, fossils and morphology: combined data analysis and a revised time			Muscidae: first results - and problems Adrian Por	
	scale for higher-level phylogeny of the Brachycera Brian Wiegmann			Muscidae (Diptera) of the Neotropical Region: taxonomy of the basal groups Claudio Carvalho	
	Molecular and morphological evidence supporting relationships within			Muscidae (Diptera) of the Neotropical Region -	
	Eremoneura: focus on Cyclorrhapha Jeff Skevington			taxonomy of the apical groups M†rcia Couri	
	Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton			A molecular phylogeny of the <i>Stomoxys</i> group based on cytochrome oxidase I. (Presented by Adrian Pont Rosanna Giordano	
	In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd				
l0.30- l1.00	REFRESHMENTS - Student U	nion			
11.00- 12.30	SYMPOSIUM - Multiple Da Dipteran Phylogeneti (<i>Chair: Brian Wi</i>	cs (continued)	Steele Build	scidae, Anthomyiidae ding Room 324 Adrian Pont)	
	SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206				
	Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela			Thricops Rondani (Diptera: ecular and morphological	
	Phylogeny of Syrphinae (Diptera, Syrphidae) on the basis of morphological and molecular characters Heikki Hippa			Muscidae in the Neotropica pproach Claudio Carvalho	

Combining molecular and morphological data for Comparison of the cuticular hydrocarbons of 7 Sepsidae, Coelopidae, and Diopsidae: More conflict than Musca spp. worldwide (Diptera: Muscidae) David congruence Rudolf Meier Carlson Phylogeny of the small headed-flies (Diptera: Acroceridae) using multiple molecular markers **Shaun** Winterton 15 minute break before start of next session SYMPOSIUM - Diptera in Biodiversity and **Conservation 3** An estimate of dipteran species- richness in Australia **David Yeates** 12.30-LUNCH - Student Union 1.30 1.30-**WORKSHOP - Management of Tephritidae** SYMPOSIUM - Diptera in **WORKSHOP** -3.00 **Biodiversity and** Steele Building room 309 Systematics and Ecology **Conservation 3** (Chair: Dick Drew) of Oestroidea + Steele Building Room 206 Hippoboscoidea (Chair: Rudolf Meier) Steele Building Room 324 (Chair: James O'Hara) Nearctic Diptera: what we Antlered Flies (Tephritidae: Phytalmia) of New Advances in the know and what we do not Guinea and Australia Gary Dodson phylogenetics of the Chris Thompson Tachininae (Tachinidae) Sexual selection in a tropical fruit fly: role of a James O'Hara The Afrotropical Diptera - an plant derived chemical in mate choice S Raghu overview Brian Stuckenberg A review of New World Geographical distribution and seasonal Zaira Robineau-Desvoidy Neotropical Diptera abundance of pest fruit flies in Papua New (Diptera; Tachinidae; Guinea David Putulan biodiversity: an overview Blondeliini) **Dan Hansen Dalton De Souza Amorim** Polytene chromosome analysis, esterase Louse-flies (Diptera: Dipteran biodiversity of the isozyme and Larval Serum Protein (LSP) Hippoboscidae) in the Gal‡pagos Islands (Ecuador) banding patterns in the melon fly Bactrocera Central Black Soil Region of **Bradley Sinclair** cucurbitae Coq. (Diptera: Tephritidae) with Russia Sergey Gaponov reference to irradiation treatment Farzana Hawaii as a Diptera Yesmin biodiversity Hot Spot: a helluva lot of halteres in the Hawaiian Islands **Neal Evenhuis** New Zealand Diptera: diversity and scope for further studies Rod Macfarlane 3.00-**REFRESHMENTS - Student Union** 3.30 3.30-**SYMPOSIUM - Diptera in Biodiversity and WORKSHOP - Agromyzidae** 5.00 Steele Building Room 309 **Conservation 4** Steele Building Room 206 (Chair: David Henshaw) (Chair: Dan Bickel) Assessing species richness of Diptera using museum Tribute to Kenneth Spencer collections Frederik Petersen The phylogeny of Agromyzidae inferred from Extrapolating from the observed species richness in a morphological characters Martin Dempewolf revision to its 'true' species diversity. A case study using Euscelidia (Asilidae: Diptera) Torsten Dikow Mine density, parasitism and emergence of the leafminers, *Liriomyza cicerina* (Rondani) and Spectacular diversity in *Cladochaeta* (Drosophilidae): Liriomyza bryoniae (Kalt.) (Diptera: Agromyzidae), anomalous or typical for Neotropical acalyptrate flies? and parasitoids on broad beans in Egypt. Samir El-**David Grimaldi** Serwy

	Why are there so many genera of Chloropidae? Terry Wheeler The diversity of neotropical Micropezidae Steve Marshall Biodiversity studies of Namibian Diptera - a developing country approach Ashley Kirk-Spriggs	Seasonal fluctuations of the wheat leafminer, Agromyza nigrella (Rondani) (Diptera: Agromyzidae), and parasitism in Lower and Middle Egypt. Samir El- Serwy Revision of nearctic species of Cerodontha (Cerodontha) (Diptera: Agromyzidae) with additional notes on other subgenera Stephanie Boucher A CD-ROM on Agromyzidae of economic significance
		Martin Dempewolf Feeding habits and the so called phytophagy of Chloropidae (Diptera) Michael von Tschirnhaus
7.00	DINNER AT AUSTRALIAN WOOLSHED Coaches depart Woolshe	depart from Kings College 6.15pm Coaches d at 10.30pm

Time	WEDNESDAY 2 OCTOBER	
8.10- 8.50	PLENARY SPEAKER - Steele Building Room 206 The fossil history of associations between the Dipter Smithsonian Institution (Chair: Brian Stucken)	
09.00- 10.30	CONTRIBUTED PAPERS - Fossils and Biogeography (Chair: Conrad Labandeira) and CONTRIBUTED PAPERS - Evolution and Biology (Chair: Gary Taylor) Steele Building Room 206	CONTRIBUTED PAPERS - Behaviour and Physiology Steele Building Room 309 (Chair: Gary Dodson)
	Origin of main evolutionary lineages of the Diptera - fossil evidences Wieslaw Krzeminski	Regulation of bioluminescence in Australian glow-worms David Merritt
	How recent are the Empidoidea of Baltic amber? Hans Ulrich Amphipacific disjunctions in net-winged midges (Diptera: Blephariceridae) Peter Zwick 15 Minute break before start of next session CONTRIBUTED PAPERS - Evolution and Biology The Fergusoninidae: co-evolution between gall- flies, nematodes and their myrtaceaous hosts. Gary Taylor New Zealand robber flies: phenology and biogeography Rod Macfarlane	Chemical cues regulate oviposition site selection in the midge Chironomus tepperi Skuse (Chironomidae) Mark Stevens Different female ovipositing strategies in tephritid species of the family Tephritidae (Diptera) in Centaurea scabiosa (Asteraceae) - central Europe Judita Kinkorova Flies that attack polymorphic snails on coloured backgrounds: selection for crypsis by a sarcophagid parasitoid of the marine snail Littoraria filosa Steve McKillup
10.30- 11.00	REFRESHMENTS - Student Union	
11.00- 12.30	CONTRIBUTED PAPERS - Evolution and Biology Steele Building Room 206 (Chair: Gary Taylor)	WORKSHOP - Cecidomyiidae Steele Building Room 309 (Chair: Junichi Yukawa)
	Evolution of the sclerotised plant-piercing oviscapt in <i>Thrypticus</i> (Diptera: Dolichopodidae) Daniel Bickel	Facultative competition between two gall-midge species (Cecidomyiidae) on <i>Suaeda monoica</i> (Chenopodiaceae) Netta Dorchin
	Do Wolbachia infections obscure phylogeographic patterns of the European cherry fruit fly? Markus	Synchronization of gall midge emergence with host plans phenology Junichi Yukawa

Riegler The gall midges (Cecidomyiidae) of Carya (Juglandaceae) in the Nearctic Region Raymond Gagne Fly pollination and plant breeding systems: are flies good pollinators? Chris Borkent Pupal characteristics of the Japanese Asphondylia gall midges (Diptera: Cecidomyiidae) and their species On the natural history and all life-history stages of identification by DNA sequencing Nami Uechi the only European stalk-eyed fly, Sphyracephala europaea (Diopsidae: Diptera). Mihaly Foldvari Morphology and a preliminary phylogenetic analysis of immatures of Neotropical Asphondyliini genera (Diptera: The immature stages of soldier-flies (Diptera, Cecidomyiidae) Dalton De Souza Amorim Stratiomyidae) in South America - new reports and biodiversity Jose Roberto Pujol Luz Inter- and intraspecific comparison among Asteralobia gall midges (Diptera: Cecidomyiidae) on *Ilex* species Sex, flies and videotape: pollination and sexual (Aguifoliaceae): sympatric vs. allopatric speciation deception in the Australian terrestrial orchid Makoto Tokuda Pterostvlis Joanna Hamilton Zoophagous gall midges of the Italian fauna (Diptera: Understanding the evolution of insect: microbe Cecidomyiidae) Mario Solinas associations using Drosophila melangaster whole genome microarrays Elizabeth McGraw 12.30 LUNCH - Student Union 1.30 1.30-SYMPOSIUM - Digital Diptera: Fly **CONTRIBUTED PAPERS - Systematics of Simuliidae** 3.00 **Identification in the New Millennium** Steele Building Room 309 Steele Building Room 206 (Chair: Sixto Coscarón) (Chair: Steve Marshall) Fly identification: crisis, revolution or evolution? Do the Neotropical Simulium subgenera constitute a monophyletic taxon? Daniel Rafael Miranda-Esquivel Steve Marshall An interactive key to fly families: from Australia to A cladistic definition of Simulium (Ectemnaspis) and S. the world! David Yeates (Psilopelmia) subgenera (Diptera: Simuliidae) Sixto Coscarón Simplified digital photography for museum work Stephen Gaimari Systematics of black flies (Diptera: Simuliidae) in Thailand Suwannee Phayuhasena Identification: some basics and their implications for digital solutions Chris Thompson Taxonomic revision and cladistic analysis of Simulium (Hearlea) Vargas, Martínez Palacios & Díaz Nájera DORSALIS - an interactive key to fruit flies of the (Diptera: Simuliidae) Sixto Coscarón Bactrocera (Bactrocera) dorsalis complex Amy Lawson Identification of flies (Diptera) and other insects by general audiences using digital technologies: unlimited access to illustrations Riley Nelson 3.00-REFRESHMENTS - Student Union 3.30 3.30-CONTRIBUTED PAPERS - Phylogeny of Lower Diptera and Lower Brachycera 5.00 Steele Building Room 206 (Chair: Brad Sinclair) From polyphyly to biogeography of Thereva (Asiloidea: Therevidae) Kevin Holston New molecular and morphological evidence for the phylogenetic placement of Phycini and Xestomyzini (Diptera, Therevidae) Martin Hauser The Exoprosopini, Australia and the world: revelations from systematic studies Christine Lambkin A phylogenetic analysis of Bibionidae Scott Fitzgerald The main clades of Sciaridae (Diptera) Pekka Vilkamaa 5.00-OPEN COUNCIL MEETING Steele Building Room 206 6.00 6.00-HAPPY HOUR - FREE EVENING 7.00

	Time	THURSDAY 3 OCTOBER
1		

9/2020		5th International Dipterology Conference	
	PLENARY SPEAKER - Steele Building The Evolution of Segmentation and Boo Sinclair)		of Chicago (Chair: Brad
9.00- 10.30	WORKSHOP - Development (Chair: David Merritt) and SYMPOSIUM - The Genetics of Biological Invasions (Chair George Roderick) Steele Building Room 206	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building 309 (Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology of Calliphoridae and Sarcophagidae Steele Building Room 324 (Chair: James Wallman)
	Evolution of embryonic axis specification in Diptera Urs Schmidt-Ott	The biogeographical relationships of the Acroceridae of Africa, Madagascar and South America Evert Schlinger	Phylogeny of Chrysomyine blow flies Hiromu Kurahash Biodiversity of sarcophagid,
	Influential Passengers: Inherited Wolbachia infections of insects Scott O'Neill	New insights into the palaeogeography and breakup of Gondwana, and some associated biogeographical topics Brian	calliphorid and muscid flies (Diptera) of Sundarbans Biosphere Reserve, India Bhanu Chandra Nandi
	10 Minute break before next Session SYMPOSIUM - The Genetics of	Stuckenberg African biogeography patterns - an introduction Ashley Kirk-Spriggs	The evolution of ectoparasitism in calliphorid blowflies Jamie Stevens
	Biological Invasions Introduction George Roderick Genetic tools for studying invasive Diptera Andrew Bohonak	The distributional patterns for neotropical / afrotropical / autralo-oriental <i>Simulium</i> Latreille (Diptera: Simuliidae) subgenera Daniel Rafael Miranda-Esquivel	Flesh flies (Sarcophagidae) from southern Appalachian mountain summits: rare species, rare sites, and human encroachment Greg
	Tracking the spread of the invasive horn and buffalo flies, <i>Haematobia irritans irritans</i> and <i>H. i. Exigua</i> , using cytochrome oxidase I and <i>Wolbachia</i> Rosanna Giordano (Presented by Adrian Pont)	Biogeography of Afrotropical Chironomidae (Diptera) Torbjorn Ekrem The phylogenetic relationships of <i>Archaeochlus</i> Brundin, <i>Austrochlus</i> Cranston and <i>Afrochlus</i> Freeman (Diptera: Nematocera), basal chironomid genera with a Gondwanan connection Jon Martin	Molecular systematics and identification of Australian carrion-breeding blowflies James Wallman
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	SYMPOSIUM - The Genetics of Biological Invasions Steele Building Room 206 (Chair: George Roderick)	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building Room 309 Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology of Calliphoridae and Sarcophagidae Steele Building Room 324 (Chair: James Wallman)
	Medfly (<i>Ceratitis capitata</i>) bioinvasions of California Giulliano Gasperi Inferring the source of outbreak populations of Queensland fruit fly Stuart Gilchrist	The present state of taxonomy and biogeography of the Heleomyzidae and Trixoscelididae in the Afrotropical Region. A.J. Woznica (Presented by Ashley Kirk-Spriggs)	Sarcophaga megafilosia and S. meiofilosia: flesh fly parasitoids of marine snails in Central Queensland mangroves Thomas Pape
	Diptera invasions in South Pacific islands: consequences for public health Neil Davies	Zoogeographical distribution of Afrotropical species of <i>Atherigona</i> Rondani (Diptera: Muscidae) Michael Chidoze Dike	The joint post feeding radial larval dispersal in flies of genus <i>Chrysomya</i> : weight, depth and distance for
	Are flies model insect invaders? Genetics, ecology, behavior, and adaptation George Roderick	Southern African Empidoidea (Diptera): phylogenetic patterns and biogeographic implications Bradley Sinclair	pupation Leonardo Gomes
		African Mythicomyiidae (Diptera) - biogeographic Implications of a	

		diverse group of flies Neal Evenhuis	
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00	CONTRIBUTED PAPERS - Phylogeny of Cyclorrhapha Steel Building Room 206 (Chair: Christine Lambkin)	CONTRIBUTED PAPERS - Systematics of Lower Diptera Steel Building Room 309 (Chair: Greg Courtney)	WORKSHOP - Empidoidea Steel Building Room 324 (Marc Pollett)
	The main clades of the Sphaeroceridae (Diptera) Natalia Kuznetzova Stirring the classification of Sphaeroceroidea or Heteromyzoidea David McAlpine Relationships and limits of the Pyrgotidae (Diptera: Schizophora: Tephritoidea) Valery Korneyev Aiming for a phylogenetic classification of the Lauxanioidea Stephen Gaimari Towards a phylogenetic classification of Syrphidae (Diptera) Sergey Kuznetzov	A re-examination of the 'Chaoboriform' genera (Diptera: Chaoboridae) using larval morphological characters Joshua Ogawa The position of the subfamily Bruchomyiinae in the family Psychodidae Ruediger Wagner Austrochironomus, a subgenus of Chironomus Meigen (Diptera: Chironomidae) Masaru Yamamoto Towards a phylogeny of Tanytarsus van der Wulp. Is morphology alone sufficient to reconstruct the genealogical relationships between species in Chironomidae? Torbjorn Ekrem Revision of Wyeomyia (Hystatomyia) Dyar & Knab (Diptera: Culicidae) Jessica Adkins	Dolichopodidae in the canopy of lowland primary rainforest on the north coast of Papua New Guinea Patrick Grootaert Species groups within the genus Hilara (Empididae) in New Zealand Ian Andrew The ultrastructure and function of the silk-producing basitarsus in the Hilarini (Diptera: Empididae) James Young A new species of Nemedina Chandler from mid-Asia (Diptera: Empidoidea) resolves the phylogenetic position of this enigmatic genus Bradley Sinclair Systematics of Nearctic Platypalpus Macquart (Empidoidea: Tachydromiinae) Jeffrey Cumming
3.00- 3.30	REFRESHMENTS - Student Union		
3.30- 5.00	CONTRIBUTED PAPERS - Systematics of Eremoneura Steel Building Room 206 (Chair: Margaret Schneider)	CONTRIBUTED PAPERS - General Medical and Veterinary Entomology Steel Building Room 309 (Chair: Marlene Elson-Harris)	WORKSHOP - Empidoidea Steel Building Room 309 (Chair: Marc Pollett)
	Recent advances in the study of the Asteiidae Amnon Freidberg A new look at the Milichiidae, and a revision of Litometopa Sabrosky (Diptera, Schizophora) Irina Brake Cladistic analysis of the genus Ceratitis MacLeay (Diptera, Tephritidae) Marc De Meyer A revision of Asilostoma Hendel, 1925 (Diptera, Lauxaniidae) Vera Cristina Silva Taxonomic revision of the Afrotropical species of the Eudorylini (Diptera: Pipunculidae) with discussion on special male genital characters Mihaly Foldvari	Biology and ecology of sand flies in new Z.C.L. foci in Semnan province, Iran Hadi Vatani New World screwworm sex pheromone: isolation and synthesis David Carlson Risk-spreading larviposition behaviour of nasopharyngeal Cephenemyia (Diptera:Oestridae) parasites of deer John Anderson Host specific oestrids of deer repelled by non-host odours John Anderson Ecology of sandflies in the main central foci of zoonotic cutaneous leishmaniasis of Iran Yaghoobi-Ershadi	Phylogenetic relationships within the Empidinae (Empididae) Christophé Daugeron The world fauna of Rhamphomyia (Megacyttarus) Miroslav Bartak Preliminary results of a revision of the Neotropical Neurigoninae (Dolichopodidae) Stefan Naglis Cladistic relationships of the subfamily Dolichopodinae Scott Brooks An overview of recent ecological research on

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New concepts of Conopinae (Diptera: Conopidae) Margaret Schneider	African schistoso predatory sciom Miller Studies on the a measure agains	omiasis host snails by yzid fly larvae Ray anti-bloodsucking the Hirosia iyoensis cracking methods	Dolichopodidae in Flanders (Belgium) Marc Pollet
		R ON RIVER QUEEN	
Coaches Depart Kings Colle	ege at 6.15pm	Coaches Depart R	liver Queen at 10.30pm

Time	FRIDAY 4 OCTO	BER	
8.10-	PLENARY SPEAKER - Steele Building Room 206 Mosquito-borne disease in Australia - an increasing		
8.50 09.00- 10.30	Entomology: Mosquitoes Steele Building Room 206	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309	
	Induced immunity against haemolymph proteins of Anopheles stephensi: effects on fecundity of mosquito and transmission blocking of malaria parasites Surendra Gakhar	(Chair: Thomas Pape) Keynote Address Diptera: Discovery and Dissemination in a Digital Domain (D5) Chris Thompson Embracing specimen-level databases: expectations and anxieties! Michael Irwin Meeting the interrelated challenges of specimen, nomenclature, and literature tracking with Mandala Gail Kampmeier	
10.30-	Effects of three plant extracts on eggs and larval development of <i>Culex pipiens</i> L. Ahmed Zaitoun		
11.00 11.00- 12.30	REFRESHMENTS - Student Union	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Botanical management of filarial vector, <i>Culex</i> quinquefasciatus Say Kadarkarai Murugan	Collection management and databasing at the Entomology Department of INBio, Costa Rica.	

	Morphological and molecular identification of forensically important blow fly species (Diptera: Calliphoridae) from Taiwan Shiuh-Feng Shiao	Asilidae database - content, structure and accessibility Torsten Dikow A World catalogue of Pallopteridae (Diptera)
	Blowflies associated with pig carcasses exposed in different environments and altitudes in Southeastern Brazil. Aricio Linhares	Bernhard Merz Catalogue of the Craneflies of the World with
	The humble maggot in the 21st Century, a compendium of information Ian Dadour	a note on the work by C.P. Alexander (author of 11559 cranefly names) Pjotr Oosterbroek
12.45- 1.15	CLOSING CEREMONY, AWARDING OF PRIZES AND INVI	TATION TO NEXT CONGRESS
1.15- 2.15	LUNCH - Student Union	

Information Disclaimer: The speakers, topics and times are correct at the time of publishing. In the event of unforeseen circumstances, the organisers reserve the right to alter or delete items from the Congress Program

<u>Sunday 29 September</u> | <u>Monday 30 September</u> | <u>Tuesday 1 October</u> | <u>Wednesday 2 October</u> | <u>Thursday 3 October</u> | <u>Friday 4 October</u>

Time	SUNDAY 29 SEPTEMBER			
	4.00pm - REGISTRATION			
5.0	5.00pm - 7.00pm - WELCOME DRINKS - Student Union Heath/Holt			
6pm V	Rooms Velcome Address by David Yeates "Blowies, Mossies and the Great			
	Aussie Salute"			

Time	MONDAY 30 SEPTEMBER	
8.00 -	REGISTRATION	
9.00- 9.30	WELCOME and OPENING ADDRESS - Steele Building Room 206 Welcome by David Yeates (Chair) Welcome to University of Queensland by Professor David Siddle (Deputy Vice-Chancellor (Research), University of Queensland) Geoff Garrett (CEO, CSIRO)	
9.30- 10.30	SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry, with Emphasis on Diptera (Chair: Mike Irwin) The influence of modern innovations on systematic inquiry, with emphasis on Diptera Michael Irwin Phylogenetic assessment: the advent of the Hennigian Philosophy Rudolf Meier Molecular biology: a set of new characters for phylogenetic assessment Brian Wiegmann Modern innovations in systematic inquiry Christine Lambkin	
10.30- 11.00	DEEDECUMENTS Student Union	
11.00- 12.30	Bioinformatics and the manipulation of biological information Jim Croft	
12.30- 1.30	LUNCH - Student Union	
1.30- 3.00	SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry with Emphasis on Diptera (continued) (Chair: Mike Irwin) and SYMPOSIUM - Diptera in Biodiversity and Conservation 1 (Chair: Rudolf Meier) Steele Building Room 206	WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)
	Diptera: a lot of flies yet to be discovered Chris Thompson	An overview of Horn Fly (Diptera: Muscidae) resistance surveys and research programs in the United States Fred Knapp

RAM to rammed earth: a perspective from UNESCO Ian Cresswell

Concluding remarks, questions and discussion: Panel of Speakers David Yeates

2.15pm SYMPOSIUM - Diptera in Biodiversity and Conservation 1

Guild analyses in the study of dipteran biodiversity; a rationale and critique Roger Kitching

Diptera diversity on tree trunks Daniel Bickel

Australian glowworms (Diptera: Keroplatidae: Arachnocampa Spp.): identity, diversity, and management Claire Baker

Discovering and managing the patterns of life - from Field surveys of insecticide resistance in Australian buffalo fly Haematobia irritans exigua De Meijere (Diptera: Muscidae) Bill Farnsworth

> A summary of studies on the economic impact of horn flies Jerry Hogsette

Management and resistance of horn fly and buffalo fly: diagnostic techniques for metabolic resistance John Pruett

Management and resistance of horn fly and buffalo fly: diagnostic techniques for target site resistance Felix Guerrero

Movement of horn flies among cattle herds Ronnie **Bvford**

3.00-**REFRESHMENTS - Student Union** 3.30

3.30-SYMPOSIUM - Diptera in 5.00 **Biodiversity and Conservation** Steele Building Room 206

Antler flies (Phytalmia, Tephritidae) are fascinating, but not bioindicators Gary Dodson

(Chair: Dan Bickel)

Sedges, mud and myriads of flies: the brachyceran fauna of sedge meadows in southern Canada Frederic Beaulieu

Chironomid communities (Diptera, Chironomidae) in cold alpine springs. Prospect for a long-term biomonitoring Elisabeth Stur

The dipteran fauna of a Central European mountain stream Ruediger Wagner

The method of the evaluation of antropogenic changes in the environment by means of the family Chloropidae (Diptera). Stepan Kubik

Habitat modification and dipteran biodiversity in central New Zealand

Ian Andrew

Biodiversity patterns in Neotropical dolichopodid faunas (Diptera: Dolichopodidae) Marc Pollet

Status and geographical distribution of three endangered Karelian keroplatids (Diptera: Keroplatidae) Dimitri Bartenev

WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)

Behaviour-modifying systems for the control of buffalo fly, Haematobia irritans exigua de Meijere (Diptera: Muscidae) Rudolf Urech

Control of the horn fly and buffalo fly - past, present and future chemistries and strategies John

Riner

The use of endectocides for horn fly control **James Hawkins**

Strategies for managing horn fly, Haematobia irritans, resistance Lane Foil

WORKSHOP - Sciomyzidae Steele Building Room 324 (Chair: Lloyd Knutson)

The struggle over reconstructing the phylogenetic relationships of the Sciomyzoidea (Diptera) Rudolf Meier

Morphodiversity and biodiversity in Sepedon Latreille and related genera: a lineage, a tribe, or a subfamily? (Diptera: Sciomyzidae) Lloyd Knutson

Sepedon knutsoni, a second oligochaete feeding sciomyzid from Africa Jean-Claude Vala

Predation and trail-following behaviour in selected marsh fly species (Diptera: Sciomyzidae) Rory Mc Donnell

2020		our international Bij	derology Contended	
Time		TUESDAY 1	OCTOBER	
3.00 -	REGISTRATION			
8.10-	PLENARY SPEAKER - Steele Building Room 206			
8 50	Phylogenetic relationships of nematocerous Diptera: synopsis of recent hypotheses Greg Courtney , Iowa State University (Chair: Monty Wood)			
9.00- 10.30	SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann)	SYMPOSIUM - Sperm Olympics: Sperm Competiton, Cryptic Female Choice and Mating Behaviour in Diptera Steele Building Room 309 (Chair: Marion Kotrba)		WORKSHOP - Muscidae Anthomyiidae Steel Building Room 32 (Chair: Adrian Pont)
				Diversity and taxonomy of
	A genomic approach to phylogenetics: multiple gene systematics of the Drosophilidae Patrick O'Grady Significant incongruence can	The female reproductive tract in Diptera I: an introduction Marion Kotrba The female reproductive tract in Diptera II: morphological diversity and details of the female reproductive tract in acalyptrate Schizophora Marion Kotrba Female remating, operational sex ratio, and the arena of sexual selection Therese Markow The labyrinth explored: female sperm storage organs, related structures, and sperm storage patterns in the tephritid fly, Anastrepha suspensa. Ann Fritz Female remating, sperm displacement, remating speed, fertility, Drosophila ananassae Shree Ram Singh Non-antagonistic reproductive interactions between the sexes: offsetting the load of sexual conflict Lacey Knowles		The plumosa group of Hydrophoria (Anthomyiidae) Masaaki Suwa A cladistic analysis of the Muscidae: first results - and problems Adrian Pon Muscidae (Diptera) of the Neotropical Region:
	be informative: insights from partitioned support analyses Christine Lambkin			
	Genes, fossils and morphology: combined data analysis and a revised time			
	scale for higher-level phylogeny of the Brachycera Brian Wiegmann			
	Molecular and morphological evidence supporting relationships within Eremoneura: focus on Cyclorrhapha Jeff Skevington			Muscidae (Diptera) of the Neotropical Region - taxonomy of the apical groups M *rcia Couri
	Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd			A molecular phylogeny of the <i>Stomoxys</i> group based on cytochrome oxidase I. (Presented by Adrian Pont Rosanna Giordano
	REFRESHMENTS - Student U	nion		IL
11.00- 12.30	SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and		WORKSHOP - Muscidae, Anthomyiidae Steele Building Room 324 (Chair: Adrian Pont)	
	SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206			
	Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela Phylogeny of Syrphinae (Diptera, Syrphidae) on the		Phylogeny of the genus <i>Thricops</i> Rondani (Diptera: Muscidae) based on molecular and morphological evidence. Jade Savage	
	basis of morphological and molecular characters Heikki Hippa		Region - a preliminary approach Claudio Carvalho	

	Combining molecular and morpl Sepsidae, Coelopidae, and Diop congruence Rudolf Meier	sidae: More conflict than	Comparison of the cutic Musca spp. worldwide (I	
	Phylogeny of the small headed- Acroceridae) using multiple mol Winterton			
	15 minute break before s	tart of next session		
	SYMPOSIUM - Diptera ir Conservati			
	An estimate of dipteran species David Yeates	- richness in Australia		
12.30- 1.30	LUNCH - Student Union			
1.30-3.00	30- SYMPOSIUM - Diptera in Biodiversity and Conservation 3 Steele Building Room 206 (Chair: Rudolf Meier) WORKSHOP - Management of Tephritidae Steele Building room 309 (Chair: Dick Drew) Systematics of Oe Hippo Steele Building Room 206		WORKSHOP - Systematics and Ecology of Oestroidea + Hippoboscoidea Steele Building Room 324 (Chair: James O'Hara)	
	Nearctic Diptera: what we know and what we do not Chris Thompson The Afrotropical Diptera - an overview Brian Stuckenberg Neotropical Diptera	Antlered Flies (Tephritidae: <i>Phytalmia</i>) of New Guinea and Australia Gary Dodson Sexual selection in a tropical fruit fly: role of a plant derived chemical in mate choice S Raghu Geographical distribution and seasonal abundance of pest fruit flies in Papua New		Advances in the phylogenetics of the Tachininae (Tachinidae) James O'Hara A review of New World Zaira Robineau-Desvoidy
	biodiversity: an overview Dalton De Souza Amorim Dipteran biodiversity of the Gal‡pagos Islands (Ecuador) Bradley Sinclair Hawaii as a Diptera biodiversity Hot Spot: a helluva lot of halteres in the Hawaiian Islands Neal Evenhuis	Guinea David Putulan Polytene chromosome analysis, esterase isozyme and Larval Serum Protein (LSP) banding patterns in the melon fly <i>Bactrocera cucurbitae</i> Coq. (Diptera: Tephritidae) with reference to irradiation treatment Farzana Yesmin		(Diptera; Tachinidae; Blondeliini) Dan Hansen Louse-flies (Diptera: Hippoboscidae) in the Central Black Soil Region of Russia Sergey Gaponov
	New Zealand Diptera: diversity and scope for further studies Rod Macfarlane			
3.00- 3.30	REFRESHMENTS - Student U	nion		
3.30- 5.00	SYMPOSIUM - Diptera in Biodiversity and Conservation 4 Steele Building Room 206 (Chair: Dan Bickel)		WORKSHOP - Agromyzidae Steele Building Room 309 (Chair: David Henshaw)	
	Assessing species richness of Diptera using museum collections Frederik Petersen Extrapolating from the observed species richness in a revision to its 'true' species diversity. A case study using <i>Euscelidia</i> (Asilidae: Diptera) Torsten Dikow Spectacular diversity in <i>Cladochaeta</i> (Drosophilidae): anomalous or typical for Neotropical acalyptrate flies? David Grimaldi		Tribute to Kenneth Spencer	
			The phylogeny of Agromyzidae inferred from morphological characters Martin Dempewolf Mine density, parasitism and emergence of the leafminers, <i>Liriomyza cicerina</i> (Rondani) and <i>Liriomyza bryoniae</i> (Kalt.) (Diptera: Agromyzidae), and parasitoids on broad beans in Egypt. Samir El-Serwy	

Wheeler	Seasonal fluctuations of the wheat leafminer, <i>Agromyza nigrella</i> (Rondani) (Diptera: Agromyzidae), and parasitism in Lower and Middle
The diversity of neotropical Micropezidae Steve Marshall	Egypt. Samir El- Serwy
	Revision of nearctic species of Cerodontha (Cerodontha) (Diptera: Agromyzidae) with additional notes on other subgenera Stephanie Boucher
	A CD-ROM on Agromyzidae of economic significance Martin Dempewolf
	Feeding habits and the so called phytophagy of Chloropidae (Diptera) Michael von Tschirnhaus
7.00 DINNER AT AUSTRALIAN WOOLSHED Coaches depart Woolshe	depart from Kings College 6.15pm Coaches d at 10.30pm

Time	WEDNESDAY 2 OCTOBER		
	PLENARY SPEAKER - Steele Building Room 206 The fossil history of associations between the Diptera and other organisms Conrad Labandeira, Smithsonian Institution (Chair: Brian Stuckenberg)		
09.00- 10.30	CONTRIBUTED PAPERS - Fossils and Biogeography (Chair: Conrad Labandeira) and CONTRIBUTED PAPERS - Evolution and Biology (Chair: Gary Taylor) Steele Building Room 206	CONTRIBUTED PAPERS - Behaviour and Physiology Steele Building Room 309 (Chair: Gary Dodson)	
	Origin of main evolutionary lineages of the Diptera - fossil evidences Wieslaw Krzeminski	Regulation of bioluminescence in Australian glow-worms David Merritt	
	How recent are the Empidoidea of Baltic amber? Hans Ulrich	Chemical cues regulate oviposition site selection in the midge <i>Chironomus tepperi</i> Skuse (Chironomidae) Mark Stevens	
	Amphipacific disjunctions in net-winged midges (Diptera: Blephariceridae) Peter Zwick	Different female ovipositing strategies in tephritid species of the family Tephritidae (Diptera) in Centaurea	
	15 Minute break before start of next session	scabiosa (Asteraceae) - central Europe Judita	
	CONTRIBUTED PAPERS - Evolution and Biology	Kinkorova Flies that attack polymorphic snails on coloured	
	The Fergusoninidae: co-evolution between gall-flies, nematodes and their myrtaceaous hosts. Gary Taylor	backgrounds: selection for crypsis by a sarcophagid parasitoid of the marine snail <i>Littoraria filosa</i> Steve McKillup	
	New Zealand robber flies: phenology and biogeography Rod Macfarlane		
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	CONTRIBUTED PAPERS - Evolution and Biology Steele Building Room 206 (Chair: Gary Taylor)	WORKSHOP - Cecidomyiidae Steele Building Room 309 (Chair: Junichi Yukawa)	
	Evolution of the sclerotised plant-piercing oviscapt in <i>Thrypticus</i> (Diptera: Dolichopodidae) Daniel Bickel	Facultative competition between two gall-midge species (Cecidomyiidae) on <i>Suaeda monoica</i> (Chenopodiaceae) Netta Dorchin	
	Do Wolbachia infections obscure phylogeographic patterns of the European cherry fruit fly? Markus	Synchronization of gall midge emergence with host plan phenology Junichi Yukawa	

12.30-	Riegler Fly pollination and plant breeding systems: are flies good pollinators? Chris Borkent On the natural history and all life-history stages of the only European stalk-eyed fly, Sphyracephala europaea (Diopsidae: Diptera). Mihaly Foldvari The immature stages of soldier-flies (Diptera, Stratiomyidae) in South America - new reports and biodiversity Jose Roberto Pujol Luz Sex, flies and videotape: pollination and sexual deception in the Australian terrestrial orchid Pterostylis Joanna Hamilton Understanding the evolution of insect: microbe associations using Drosophila melangaster whole genome microarrays Elizabeth McGraw	The gall midges (Cecidomyiidae) of Carya (Juglandaceae) in the Nearctic Region Raymond Gagne Pupal characteristics of the Japanese Asphondylia gall midges (Diptera: Cecidomyiidae) and their species identification by DNA sequencing Nami Uechi Morphology and a preliminary phylogenetic analysis of immatures of Neotropical Asphondyliini genera (Diptera: Cecidomyiidae) Dalton De Souza Amorim Inter- and intraspecific comparison among Asteralobia gall midges (Diptera: Cecidomyiidae) on Ilex species (Aquifoliaceae): sympatric vs. allopatric speciation Makoto Tokuda Zoophagous gall midges of the Italian fauna (Diptera: Cecidomyiidae) Mario Solinas	
1.30	LUNCH - Student Union		
1.30- 3.00	SYMPOSIUM - Digital Diptera: Fly Identification in the New Millennium Steele Building Room 206 (Chair: Steve Marshall)	CONTRIBUTED PAPERS - Systematics of Simuliidae Steele Building Room 309 (Chair: Sixto Coscarón)	
	Fly identification: crisis, revolution or evolution? Steve Marshall	Do the Neotropical <i>Simulium</i> subgenera constitute a monophyletic taxon? Daniel Rafael Miranda-Esquivel	
	An interactive key to fly families: from Australia to the world! David Yeates	A cladistic definition of <i>Simulium (Ectemnaspis)</i> and <i>S. (Psilopelmia) subgenera</i> (Diptera: Simuliidae) Sixto Coscarón	
	Simplified digital photography for museum work Stephen Gaimari	Systematics of black flies (Diptera: Simuliidae) in Thailand Suwannee Phayuhasena	
	Identification: some basics and their implications for digital solutions Chris Thompson	Taxonomic revision and cladistic analisis of <i>Simulium</i>	
	DORSALIS - an interactive key to fruit flies of the Bactrocera (Bactrocera) dorsalis complex Amy Lawson	(Hearlea) Vargas, Martínez Palacios & Díaz Nájera (Diptera: Simuliidae) Sixto Coscarón	
	Identification of flies (Diptera) and other insects by general audiences using digital technologies: unlimited access to illustrations Riley Nelson		
3.00- 3.30	REFRESHMENTS - Student Union		
3.30- 5.00	CONTRIBUTED PAPERS - Phylogeny of Lower Diptera and Lower Brachycera Steele Building Room 206 (Chair: Brad Sinclair) From polyphyly to biogeography of Thereva (Asiloidea: Therevidae) Kevin Holston New molecular and morphological evidence for the phylogenetic placement of Phycini and Xestomyzini (Diptera, Therevidae) Martin Hauser The Exoprosopini, Australia and the world: revelations from systematic studies Christine Lambkin A phylogenetic analysis of Bibionidae Scott Fitzgerald The main clades of Sciaridae (Diptera) Pekka Vilkamaa		
5.00- 6.00	OPEN COUNCIL MEETING Steele Building Roon	1 206	
6.00- 7.00	HAPPY HOUR - FREE EVENING		

	Time	THURSDAY 3 OCTOBER
1		

00-	Sinclair) WORKSHOP - Development	CONTRIBUTED PAPERS - African	WORKSHOP - Biology of
0.30	(Chair: David Merritt) and SYMPOSIUM - The Genetics of Biological Invasions (Chair George Roderick) Steele Building Room 206	Diptera: Biogeography and Gondwanaland Steele Building 309 (Chair: Ashley Kirk-Spriggs)	Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman)
	Evolution of embryonic axis specification in Diptera Urs Schmidt-Ott	The biogeographical relationships of the Acroceridae of Africa, Madagascar and South America Evert Schlinger	Phylogeny of Chrysomyine blow flies Hiromu Kurahas Biodiversity of sarcophagid,
	Influential Passengers: Inherited Wolbachia infections of insects Scott O'Neill 10 Minute break before next	New insights into the palaeogeography and breakup of Gondwana, and some associated biogeographical topics Brian	calliphorid and muscid flies (Diptera) of Sundarbans Biosphere Reserve, India Bhanu Chandra Nandi
	Session SYMPOSIUM - The Genetics of Biological Invasions	Stuckenberg African biogeography patterns - an introduction Ashley Kirk-Spriggs	The evolution of ectoparasitism in calliphorion blowflies Jamie Stevens
	Introduction George Roderick	The distributional patterns for neotropical / afrotropical / autralo-	Flesh flies (Sarcophagidae) from southern Appalachian
	Genetic tools for studying invasive Diptera Andrew Bohonak	oriental <i>Simulium</i> Latreille (Diptera: Simuliidae) subgenera Daniel Rafael Miranda-Esquivel	mountain summits: rare species, rare sites, and human encroachment Gree Dahlem
	Tracking the spread of the invasive horn and buffalo flies, Haematobia irritans irritans and H. i. Exigua, using cytochrome oxidase I and Wolbachia Rosanna Giordano (Presented by Adrian Pont)	Biogeography of Afrotropical Chironomidae (Diptera) Torbjorn Ekrem The phylogenetic relationships of <i>Archaeochlus</i> Brundin, <i>Austrochlus</i> Cranston and <i>Afrochlus</i> Freeman (Diptera: Nematocera), basal chironomid genera with a Gondwanan connection Jon Martin	Molecular systematics and identification of Australian carrion-breeding blowflies James Wallman
.30- .00	REFRESHMENTS - Student Union		
1.00- 2.30	SYMPOSIUM - The Genetics of Biological Invasions Steele Building Room 206 (Chair: George Roderick)	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building Room 309 Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology of Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman
	Medfly (Ceratitis capitata) bioinvasions of California Giulliano Gasperi Inferring the source of outbreak populations of Queensland fruit fly Stuart Gilchrist	The present state of taxonomy and biogeography of the Heleomyzidae and Trixoscelididae in the Afrotropical Region. A.J. Woznica (Presented by Ashley Kirk-Spriggs)	Sarcophaga megafilosia and S. meiofilosia: flesh fly parasitoids of marine snails Central Queensland mangroves Thomas Pape
	Diptera invasions in South Pacific islands: consequences for public health Neil Davies	Zoogeographical distribution of Afrotropical species of <i>Atherigona</i> Rondani (Diptera: Muscidae) Michael Chidoze Dike	The joint post feeding radia larval dispersal in flies of genus <i>Chrysomya</i> : weight, depth and distance for pupation Leonardo Gome
	Are flies model insect invaders? Genetics, ecology, behavior, and adaptation George Roderick	Southern African Empidoidea (Diptera): phylogenetic patterns and biogeographic implications Bradley Sinclair	papadon Leonardo Gome

		diverse group of flies Neal Evenhuis	
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00	CONTRIBUTED PAPERS - Phylogeny of Cyclorrhapha Steel Building Room 206 (Chair: Christine Lambkin)	CONTRIBUTED PAPERS - Systematics of Lower Diptera Steel Building Room 309 (Chair: Greg Courtney)	WORKSHOP - Empidoidea Steel Building Room 324 (Marc Pollett)
	The main clades of the Sphaeroceridae (Diptera) Natalia Kuznetzova Stirring the classification of Sphaeroceroidea or Heteromyzoidea David McAlpine Relationships and limits of the Pyrgotidae (Diptera: Schizophora: Tephritoidea) Valery Korneyev Aiming for a phylogenetic classification of the Lauxanioidea Stephen Gaimari Towards a phylogenetic classification of Syrphidae (Diptera) Sergey Kuznetzov	A re-examination of the 'Chaoboriform' genera (Diptera: Chaoboridae) using larval morphological characters Joshua Ogawa The position of the subfamily Bruchomyiinae in the family Psychodidae Ruediger Wagner Austrochironomus, a subgenus of Chironomus Meigen (Diptera: Chironomidae) Masaru Yamamoto Towards a phylogeny of Tanytarsus van der Wulp. Is morphology alone sufficient to reconstruct the genealogical relationships between species in Chironomidae? Torbjorn Ekrem Revision of Wyeomyia (Hystatomyia) Dyar & Knab (Diptera: Culicidae) Jessica Adkins	Dolichopodidae in the canopy of lowland primary rainforest on the north coast of Papua New Guinea Patrick Grootaert Species groups within the genus Hilara (Empididae) in New Zealand Ian Andrew The ultrastructure and function of the silk-producing basitarsus in the Hilarini (Diptera: Empididae) James Young A new species of Nemedina Chandler from mid-Asia (Diptera: Empidoidea) resolves the phylogenetic position of this enigmatic genus Bradley Sinclair Systematics of Nearctic Platypalpus Macquart (Empidoidea: Tachydromiinae) Jeffrey Cumming
3.00- 3.30	REFRESHMENTS - Student Union		- Canning
3.30- 5.00	CONTRIBUTED PAPERS - Systematics of Eremoneura Steel Building Room 206 (Chair: Margaret Schneider)	CONTRIBUTED PAPERS - General Medical and Veterinary Entomology Steel Building Room 309 (Chair: Marlene Elson-Harris)	WORKSHOP - Empidoidea Steel Building Room 309 (Chair: Marc Pollett)
	Recent advances in the study of the Asteiidae Amnon Freidberg A new look at the Milichiidae, and a revision of Litometopa Sabrosky (Diptera, Schizophora) Irina Brake Cladistic analysis of the genus Ceratitis MacLeay (Diptera, Tephritidae) Marc De Meyer A revision of Asilostoma Hendel, 1925 (Diptera, Lauxaniidae) Vera Cristina Silva Taxonomic revision of the Afrotropical species of the Eudorylini (Diptera: Pipunculidae) with discussion on special male genital characters Mihaly Foldvari	Biology and ecology of sand flies in new Z.C.L. foci in Semnan province, Iran Hadi Vatani New World screwworm sex pheromone: isolation and synthesis David Carlson Risk-spreading larviposition behaviour of nasopharyngeal Cephenemyia (Diptera:Oestridae) parasites of deer John Anderson Host specific oestrids of deer repelled by non-host odours John Anderson Ecology of sandflies in the main central foci of zoonotic cutaneous leishmaniasis of Iran Yaghoobi-Ershadi	Phylogenetic relationships within the Empidinae (Empididae) Christophé Daugeron The world fauna of Rhamphomyia (Megacyttarus) Miroslav Bartak Preliminary results of a revision of the Neotropical Neurigoninae (Dolichopodidae) Stefan Naglis Cladistic relationships of the subfamily Dolichopodinae Scott Brooks An overview of recent ecological research on

	эн нин на применения и применен	
New concepts of Conopinae (Diptera: Conopidae) Margaret Schneider	Biological and natural control of African schistosomiasis host snails by predatory sciomyzid fly larvae Ray Miller	Dolichopodidae in Flanders (Belgium) Marc Pollet
	Studies on the anti-bloodsucking measure against <i>Hirosia iyoensis</i> (Tabanidae) by tracking methods Mamoru Watanabe	
CONF Coaches Depart Kings Colle	ERENCE DINNER ON RIVER QUEEN ge at 6.15pm Coaches Depart R	liver Queen at 10.30pm

Time	FRIDAY 4 OCTO	BER	
8.10- 8.50	PLENARY SPEAKER - Steele Building Room 206 Mosquito-borne disease in Australia - an increasing concern? Richard Russell, University of Sydney (Chair: Scott O'Neill)		
09.00- 10.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes Steele Building Room 206 (Chair: Des Foley)	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Molecular identification of Anopheles and Culex mosquitoes Cathy Walton Mosquito control in Brisbane City Mike Muller Induced immunity against haemolymph proteins of Anopheles stephensi: effects on fecundity of mosquito and transmission blocking of malaria parasites Surendra Gakhar Insights into the population structure of the southwest Pacific malaria vector Anopheles farauti 2 (Diptera: Culicidae) by following ribosomal DNA spacer polymorphisms Nigel Beebe Molecular characterisation and species distribution of the Anopheles maculipennis complex in Iran Mehdi Sedaghat Effects of three plant extracts on eggs and larval development of Culex pipiens L. Ahmed Zaitoun	Keynote Address Diptera: Discovery and Dissemination in a Digital Domain (D5) Chris Thompson Embracing specimen-level databases: expectations and anxieties! Michael Irwin Meeting the interrelated challenges of specimen, nomenclature, and literature tracking with Mandala Gail Kampmeier	
10.30- 11.00	REFRESHMENTS - Student Union		
11.00-12.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes (continued) (Chair: Des Foley) and CONTRIBUTED PAPERS - Forensic Entomology (Chair: Ian Dadour) Steele Building room 206	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Botanical management of filarial vector, Culex quinquefasciatus Say Kadarkarai Murugan Evaluation of the effect of exposure to tannic acid and the entomopathogenic fungus Beauveria bassiana on the ecological competence of Anopheles stephensi Mohammad Saaid Dayer 10 minute break before start of next session CONTRIBUTED PAPERS - Forensic Entomology A preliminary survey of forensically important Diptera in Victoria, Australia Melanie Archer	Collection management and databasing at the Entomology Department of INBio, Costa Rica. Manuel Zumbado Mining the Dipteran genome: tools and resources from GenBank/EMBL and NCBI Brian Wiegmann Fauna Europaea - the Diptera component Thomas Pape Databasing European Dolichopodidae (Diptera) in the frame of Fauna Europaea Marc Pollet	

	Morphological and molecular identification of forensically important blow fly species (Diptera: Calliphoridae) from Taiwan Shiuh-Feng Shiao Blowflies associated with pig carcasses exposed in different environments and altitudes in Southeastern Brazil. Aricio Linhares The humble maggot in the 21st Century, a compendium of information Ian Dadour	Asilidae database - content, structure and accessibility Torsten Dikow A World catalogue of Pallopteridae (Diptera) Bernhard Merz Catalogue of the Craneflies of the World with a note on the work by C.P. Alexander (author of 11559 cranefly names) Pjotr Oosterbroek
12.45- 1.15	CLOSING CEREMONY, AWARDING OF PRIZES AND INVI	TATION TO NEXT CONGRESS
1.15- 2.15	LUNCH - Student Union	

Information Disclaimer: The speakers, topics and times are correct at the time of publishing. In the event of unforeseen circumstances, the organisers reserve the right to alter or delete items from the Congress Program

5th International Congress of Dipterology Provisional Program

<u>Sunday 29 September | Monday 30 September | Tuesday 1 October | Wednesday 2 October | Thursday 3 October | Friday 4 October</u>

Time	SUNDAY 29 SEPTEMBER
	4.00pm - REGISTRATION
5.0	0pm - 7.00pm - WELCOME DRINKS - Student Union Heath/Holt
	Rooms
6рт И	lelcome Address by David Yeates "Blowies, Mossies and the Great
	Aussie Salute"

Time	MONDAY 30 SEPTEMBER	
8.00 -	REGISTRATION	
9.00- 9.30	WELCOME and OPENING ADDRESS - Steele Building Room 206 Welcome by David Yeates (Chair) Welcome to University of Queensland by Professor David Siddle (Deputy Vice-Chancellor (Research), University of Queensland) Geoff Garrett (CEO, CSIRO)	
9.30- 10.30	SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry, with Emphasis on	
10.30- 11.00	REFRESHMENTS - Student Union	
11.00- 12.30	- Bioinformatics and the manipulation of biological information Jim Croft	
12.30- 1.30	LUNCH - Student Union	
1.30- 3.00 SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry with Emphasis on Diptera (continued) (Chair: Mike Irwin) and SYMPOSIUM - Diptera in Biodiversity and Conservation 1 (Chair: Rudolf Meier) Steele Building Room 206		Steele Building Room 309
	Diptera: a lot of flies yet to be discovered Chris Thompson	An overview of Horn Fly (Diptera: Muscidae) resistance surveys and research programs in the United States Fred Knapp

RAM to rammed earth: a perspective from UNESCO Ian Cresswell

Concluding remarks, questions and discussion: Panel of Speakers David Yeates

2.15pm SYMPOSIUM - Diptera in Biodiversity and Conservation 1

Guild analyses in the study of dipteran biodiversity; a rationale and critique Roger Kitching

Diptera diversity on tree trunks Daniel Bickel

Australian glowworms (Diptera: Keroplatidae: Arachnocampa Spp.): identity, diversity, and management Claire Baker

Discovering and managing the patterns of life - from Field surveys of insecticide resistance in Australian buffalo fly Haematobia irritans exigua De Meijere (Diptera: Muscidae) Bill Farnsworth

> A summary of studies on the economic impact of horn flies Jerry Hogsette

Management and resistance of horn fly and buffalo fly: diagnostic techniques for metabolic resistance John Pruett

Management and resistance of horn fly and buffalo fly: diagnostic techniques for target site resistance Felix Guerrero

Movement of horn flies among cattle herds Ronnie **Bvford**

3.00-**REFRESHMENTS - Student Union** 3.30

3.30-SYMPOSIUM - Diptera in 5.00 **Biodiversity and Conservation**

Steele Building Room 206 (Chair: Dan Bickel)

Antler flies (Phytalmia, Tephritidae) are fascinating, but not bioindicators Gary Dodson

Sedges, mud and myriads of flies: the brachyceran fauna of sedge meadows in southern Canada Frederic Beaulieu

Chironomid communities (Diptera, Chironomidae) in cold alpine springs. Prospect for a long-term biomonitoring Elisabeth Stur

The dipteran fauna of a Central European mountain stream Ruediger Wagner

The method of the evaluation of antropogenic changes in the environment by means of the family Chloropidae (Diptera). Stepan Kubik

Habitat modification and dipteran biodiversity in central New Zealand

Ian Andrew

Biodiversity patterns in Neotropical dolichopodid faunas (Diptera: Dolichopodidae) Marc Pollet

Status and geographical distribution of three endangered Karelian keroplatids (Diptera:

WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)

Behaviour-modifying systems for the control of buffalo fly, Haematobia irritans exigua de Meijere (Diptera: Muscidae) Rudolf Urech

Control of the horn fly and buffalo fly - past, present and future chemistries and strategies John

The use of endectocides for horn fly control **James Hawkins**

Riner

Strategies for managing horn fly, Haematobia irritans, resistance Lane Foil

WORKSHOP - Sciomyzidae Steele Building Room 324 (Chair: Lloyd Knutson)

The struggle over reconstructing the phylogenetic relationships of the Sciomyzoidea (Diptera) Rudolf Meier

Morphodiversity and biodiversity in Sepedon Latreille and related genera: a lineage, a tribe, or a subfamily? (Diptera: Sciomyzidae) Lloyd Knutson

Sepedon knutsoni, a second oligochaete feeding sciomyzid from Africa Jean-Claude Vala

Predation and trail-following behaviour in selected marsh fly species (Diptera: Sciomyzidae) Rory Mc Donnell

Keroplatidae) Dimitri Bartenev

5.00 -HAPPY HOUR / POSTER VIEWING - POSTER AUTHORS TO BE PRESENT Student Union Heath/Holt **Rooms** FREE EVENING

2020		5th International Di	pterology Conference	
Time		TUESDAY 1	OCTOBER	
3.00 -	REGISTRATION			
	PLENARY SPEAKER - Steele B			
5 EO	Phylogenetic relationships of nematocerous Diptera: synopsis of recent hypotheses <u>Greg Courtney</u> , <i>Iowa</i> State University (Chair: Monty Wood)			
9.00- 10.30	SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann)	Competiton, Cryptic Mating Behavi Steele Buildi	rm Olympics: Sperm c Female Choice and iour in Diptera ng Room 309	WORKSHOP - Muscidae Anthomyiidae Steel Building Room 32 (Chair: Adrian Pont)
	A genomic approach to	(Chair: Marion Kotrba) The female reproductive tract in Diptera I: an		Diversity and taxonomy of
	phylogenetics: multiple gene systematics of the Drosophilidae Patrick	introduction Marion Ko The female reproductive	trba e tract in Diptera II:	catkin flies (Egle, Anthomyiidae) Graham Griffiths
	O'Grady Significant incongruence can be informative: insights from	morphological diversity reproductive tract in aca Marion Kotrba	and details of the female alyptrate Schizophora	The plumosa group of Hydrophoria (Anthomyiidae) Masaaki
	partitioned support analyses Christine Lambkin	Female remating, opera arena of sexual selection	Therese Markow	Suwa A cladistic analysis of the
	Genes, fossils and morphology: combined data analysis and a revised time	organs, related structures, and sperm storage patterns in the tephritid fly, Anastrepha suspensa. Ann Fritz Female remating, sperm displacement, remating speed, fertility, Drosophila ananassae Shree Ram Singh		Muscidae: first results - and problems Adrian Por
	scale for higher-level phylogeny of the Brachycera Brian Wiegmann			Muscidae (Diptera) of the Neotropical Region: taxonomy of the basal groups Claudio Carvalho
	Molecular and morphological evidence supporting relationships within			Muscidae (Diptera) of the Neotropical Region -
	Eremoneura: focus on Cyclorrhapha Jeff Skevington			taxonomy of the apical groups M†rcia Couri
	Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton			A molecular phylogeny of the <i>Stomoxys</i> group based on cytochrome oxidase I. (Presented by Adrian Pont Rosanna Giordano
	In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence? Darlene Judd			
l0.30- l1.00	REFRESHMENTS - Student U	nion		
11.00- 12.30	SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and		Steele Build	scidae, Anthomyiidae ding Room 324 Adrian Pont)
	SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206			
	Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela			Thricops Rondani (Diptera: ecular and morphological
	Phylogeny of Syrphinae (Diptera, Syrphidae) on the basis of morphological and molecular characters Heikki Hippa			Muscidae in the Neotropica pproach Claudio Carvalho

Combining molecular and morphological data for Comparison of the cuticular hydrocarbons of 7 Sepsidae, Coelopidae, and Diopsidae: More conflict than Musca spp. worldwide (Diptera: Muscidae) David congruence Rudolf Meier Carlson Phylogeny of the small headed-flies (Diptera: Acroceridae) using multiple molecular markers **Shaun** Winterton 15 minute break before start of next session SYMPOSIUM - Diptera in Biodiversity and **Conservation 3** An estimate of dipteran species- richness in Australia **David Yeates** 12.30-LUNCH - Student Union 1.30 1.30-**WORKSHOP - Management of Tephritidae** SYMPOSIUM - Diptera in **WORKSHOP** -3.00 **Biodiversity and** Steele Building room 309 Systematics and Ecology **Conservation 3** (Chair: Dick Drew) of Oestroidea + Steele Building Room 206 Hippoboscoidea (Chair: Rudolf Meier) Steele Building Room 324 (Chair: James O'Hara) Nearctic Diptera: what we Antlered Flies (Tephritidae: Phytalmia) of New Advances in the know and what we do not Guinea and Australia Gary Dodson phylogenetics of the Chris Thompson Tachininae (Tachinidae) Sexual selection in a tropical fruit fly: role of a James O'Hara The Afrotropical Diptera - an plant derived chemical in mate choice S Raghu overview Brian Stuckenberg A review of New World Geographical distribution and seasonal Zaira Robineau-Desvoidy Neotropical Diptera abundance of pest fruit flies in Papua New (Diptera; Tachinidae; Guinea David Putulan biodiversity: an overview Blondeliini) **Dan Hansen Dalton De Souza Amorim** Polytene chromosome analysis, esterase Louse-flies (Diptera: Dipteran biodiversity of the isozyme and Larval Serum Protein (LSP) Hippoboscidae) in the Gal‡pagos Islands (Ecuador) banding patterns in the melon fly Bactrocera Central Black Soil Region of **Bradley Sinclair** cucurbitae Coq. (Diptera: Tephritidae) with Russia Sergey Gaponov reference to irradiation treatment Farzana Hawaii as a Diptera Yesmin biodiversity Hot Spot: a helluva lot of halteres in the Hawaiian Islands **Neal Evenhuis** New Zealand Diptera: diversity and scope for further studies Rod Macfarlane 3.00-**REFRESHMENTS - Student Union** 3.30 3.30-**SYMPOSIUM - Diptera in Biodiversity and WORKSHOP - Agromyzidae** 5.00 Steele Building Room 309 **Conservation 4** Steele Building Room 206 (Chair: David Henshaw) (Chair: Dan Bickel) Assessing species richness of Diptera using museum Tribute to Kenneth Spencer collections Frederik Petersen The phylogeny of Agromyzidae inferred from Extrapolating from the observed species richness in a morphological characters Martin Dempewolf revision to its 'true' species diversity. A case study using Euscelidia (Asilidae: Diptera) Torsten Dikow Mine density, parasitism and emergence of the leafminers, *Liriomyza cicerina* (Rondani) and Spectacular diversity in *Cladochaeta* (Drosophilidae): Liriomyza bryoniae (Kalt.) (Diptera: Agromyzidae), anomalous or typical for Neotropical acalyptrate flies? and parasitoids on broad beans in Egypt. Samir El-**David Grimaldi** Serwy

	Why are there so many genera of Chloropidae? Terry Wheeler	Seasonal fluctuations of the wheat leafminer, Agromyza nigrella (Rondani) (Diptera:
	The diversity of neotropical Micropezidae Steve Marshall	Agromyzidae), and parasitism in Lower and Middle Egypt. Samir El- Serwy
III I	Biodiversity studies of Namibian Diptera - a developing country approach Ashley Kirk-Spriggs	Revision of nearctic species of Cerodontha (Cerodontha) (Diptera: Agromyzidae) with additional notes on other subgenera Stephanie Boucher
		A CD-ROM on Agromyzidae of economic significance Martin Dempewolf
		Feeding habits and the so called phytophagy of Chloropidae (Diptera) Michael von Tschirnhaus
7.00		depart from Kings College 6.15pm Coaches
	depart Woolshe	d at 10.30pm

Time	WEDNESDAY 2 OCTOBER	
8.10- 8.50	PLENARY SPEAKER - Steele Building Room 206 The fossil history of associations between the Dipter Smithsonian Institution (Chair: Brian Stucken)	
09.00- 10.30	CONTRIBUTED PAPERS - Fossils and Biogeography (Chair: Conrad Labandeira) and CONTRIBUTED PAPERS - Evolution and Biology (Chair: Gary Taylor) Steele Building Room 206	CONTRIBUTED PAPERS - Behaviour and Physiology Steele Building Room 309 (Chair: Gary Dodson)
	Origin of main evolutionary lineages of the Diptera - fossil evidences Wieslaw Krzeminski	Regulation of bioluminescence in Australian glow-worms David Merritt
	How recent are the Empidoidea of Baltic amber? Hans Ulrich Amphipacific disjunctions in net-winged midges (Diptera: Blephariceridae) Peter Zwick 15 Minute break before start of next session CONTRIBUTED PAPERS - Evolution and Biology The Fergusoninidae: co-evolution between gall- flies, nematodes and their myrtaceaous hosts. Gary Taylor New Zealand robber flies: phenology and biogeography Rod Macfarlane	Chemical cues regulate oviposition site selection in the midge Chironomus tepperi Skuse (Chironomidae) Mark Stevens Different female ovipositing strategies in tephritid species of the family Tephritidae (Diptera) in Centaurea scabiosa (Asteraceae) - central Europe Judita Kinkorova Flies that attack polymorphic snails on coloured backgrounds: selection for crypsis by a sarcophagid parasitoid of the marine snail Littoraria filosa Steve McKillup
10.30- 11.00	REFRESHMENTS - Student Union	
11.00- 12.30	CONTRIBUTED PAPERS - Evolution and Biology Steele Building Room 206 (Chair: Gary Taylor)	WORKSHOP - Cecidomyiidae Steele Building Room 309 (Chair: Junichi Yukawa)
	Evolution of the sclerotised plant-piercing oviscapt in <i>Thrypticus</i> (Diptera: Dolichopodidae) Daniel Bickel	Facultative competition between two gall-midge species (Cecidomyiidae) on <i>Suaeda monoica</i> (Chenopodiaceae) Netta Dorchin
	Do Wolbachia infections obscure phylogeographic patterns of the European cherry fruit fly? Markus	Synchronization of gall midge emergence with host plant phenology Junichi Yukawa

	Riegler Fly pollination and plant breeding systems: are flies good pollinators? Chris Borkent On the natural history and all life-history stages of the only European stalk-eyed fly, Sphyracephala europaea (Diopsidae: Diptera). Mihaly Foldvari The immature stages of soldier-flies (Diptera, Stratiomyidae) in South America - new reports and biodiversity Jose Roberto Pujol Luz Sex, flies and videotape: pollination and sexual deception in the Australian terrestrial orchid Pterostylis Joanna Hamilton Understanding the evolution of insect: microbe associations using Drosophila melangaster whole genome microarrays Elizabeth McGraw	The gall midges (Cecidomyiidae) of Carya (Juglandaceae) in the Nearctic Region Raymond Gagne Pupal characteristics of the Japanese Asphondylia gall midges (Diptera: Cecidomyiidae) and their species identification by DNA sequencing Nami Uechi Morphology and a preliminary phylogenetic analysis of immatures of Neotropical Asphondyliini genera (Diptera: Cecidomyiidae) Dalton De Souza Amorim Inter- and intraspecific comparison among Asteralobia gall midges (Diptera: Cecidomyiidae) on Ilex species (Aquifoliaceae): sympatric vs. allopatric speciation Makoto Tokuda Zoophagous gall midges of the Italian fauna (Diptera: Cecidomyiidae) Mario Solinas	
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00	SYMPOSIUM - Digital Diptera: Fly Identification in the New Millennium Steele Building Room 206 (Chair: Steve Marshall)	CONTRIBUTED PAPERS - Systematics of Simuliidae Steele Building Room 309 (Chair: Sixto Coscarón)	
	Fly identification: crisis, revolution or evolution? Steve Marshall	Do the Neotropical <i>Simulium</i> subgenera constitute a monophyletic taxon? Daniel Rafael Miranda-Esquivel	
	An interactive key to fly families: from Australia to the world! David Yeates	A cladistic definition of <i>Simulium (Ectemnaspis)</i> and <i>S. (Psilopelmia) subgenera</i> (Diptera: Simuliidae) Sixto Coscarón	
	Simplified digital photography for museum work Stephen Gaimari	Systematics of black flies (Diptera: Simuliidae) in Thailand Suwannee Phayuhasena	
	Identification: some basics and their implications for digital solutions Chris Thompson	Taxonomic revision and cladistic analisis of <i>Simulium</i> (Hearlea) Vargas, Martínez Palacios & Díaz Nájera	
	DORSALIS - an interactive key to fruit flies of the Bactrocera (Bactrocera) dorsalis complex Amy Lawson	(Diptera: Simuliidae) Sixto Coscarón	
	Identification of flies (Diptera) and other insects by general audiences using digital technologies: unlimited access to illustrations Riley Nelson		
3.00- 3.30	REFRESHMENTS - Student Union		
3.30- 5.00	CONTRIBUTED PAPERS - Phylogeny of Lower Description Steele Building Room 206 (Chair: Brad Sinclair		
	From polyphyly to biogeography of Thereva (Asiloidea: Therevidae) Kevin Holston New molecular and morphological evidence for the phylogenetic placement of <i>Phycini</i> and <i>Xestomyzini</i> (Diptera, Therevidae) Martin Hauser The Exoprosopini, Australia and the world: revelations from systematic studies Christine Lambkin A phylogenetic analysis of Bibionidae Scott Fitzgerald The main clades of Sciaridae (Diptera) Pekka Vilkamaa		
5.00- 6.00	OPEN COUNCIL MEETING Steele Building Roon	1 206	
6.00- 7.00	HAPPY HOUR - FREE EVENING		

	Time	THURSDAY 3 OCTOBER
1		

	Sinclair)	ody Patterning <u>Nipan Patel</u> , <i>University of Chicago</i> (Chair: Brad	
9.00-	WORKSHOP - Development (Chair: David Merritt) and SYMPOSIUM - The Genetics of Biological Invasions (Chair George Roderick) Steele Building Room 206	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building 309 (Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology o Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman
	Evolution of embryonic axis specification in Diptera Urs Schmidt-Ott	The biogeographical relationships of the Acroceridae of Africa, Madagascar and South America Evert Schlinger	Phylogeny of Chrysomyine blow flies Hiromu Kurahas Biodiversity of sarcophagid,
	Influential Passengers: Inherited Wolbachia infections of insects Scott O'Neill	New insights into the palaeogeography and breakup of Gondwana, and some associated biogeographical topics Brian	calliphorid and muscid flies (Diptera) of Sundarbans Biosphere Reserve, India Bhanu Chandra Nandi
	10 Minute break before next Session SYMPOSIUM - The Genetics of	Stuckenberg African biogeography patterns - an introduction Ashley Kirk-Spriggs	The evolution of ectoparasitism in calliphorion blowflies Jamie Stevens
	Biological Invasions Introduction George Roderick	The distributional patterns for neotropical / afrotropical / autralo-	Flesh flies (Sarcophagidae) from southern Appalachian
	Genetic tools for studying invasive Diptera Andrew Bohonak	oriental <i>Simulium</i> Latreille (Diptera: Simuliidae) subgenera Daniel Rafael Miranda-Esquivel	mountain summits: rare species, rare sites, and human encroachment Greg Dahlem
	Tracking the spread of the invasive horn and buffalo flies, Haematobia irritans irritans and H. i. Exigua, using cytochrome oxidase I and Wolbachia Rosanna Giordano (Presented by Adrian Pont)	Biogeography of Afrotropical Chironomidae (Diptera) Torbjorn Ekrem The phylogenetic relationships of Archaeochlus Brundin, Austrochlus Cranston and Afrochlus Freeman (Diptera: Nematocera), basal chironomid genera with a Gondwanan connection Jon Martin	Molecular systematics and identification of Australian carrion-breeding blowflies James Wallman
.0.30- .1.00	REFRESHMENTS - Student Union		
11.00- 12.30	SYMPOSIUM - The Genetics of Biological Invasions Steele Building Room 206 (Chair: George Roderick)	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building Room 309 Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology of Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman
	Medfly (<i>Ceratitis capitata</i>) bioinvasions of California Giulliano Gasperi Inferring the source of outbreak populations of Queensland fruit fly Stuart Gilchrist	The present state of taxonomy and biogeography of the Heleomyzidae and Trixoscelididae in the Afrotropical Region. A.J. Woznica (Presented by Ashley Kirk-Spriggs)	Sarcophaga megafilosia and S. meiofilosia: flesh fly parasitoids of marine snails Central Queensland mangroves Thomas Pape
	Diptera invasions in South Pacific islands: consequences for public health Neil Davies	Zoogeographical distribution of Afrotropical species of <i>Atherigona</i> Rondani (Diptera: Muscidae) Michael Chidoze Dike	The joint post feeding radia larval dispersal in flies of genus <i>Chrysomya</i> : weight, depth and distance for
	Are flies model insect invaders? Genetics, ecology, behavior, and adaptation George Roderick	Southern African Empidoidea (Diptera): phylogenetic patterns and biogeographic implications Bradley Sinclair	pupation Leonardo Gome
			11

		diverse group of flies Neal Evenhuis	
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00	CONTRIBUTED PAPERS - Phylogeny of Cyclorrhapha Steel Building Room 206 (Chair: Christine Lambkin)	CONTRIBUTED PAPERS - Systematics of Lower Diptera Steel Building Room 309 (Chair: Greg Courtney)	WORKSHOP - Empidoidea Steel Building Room 324 (Marc Pollett)
	(Diptera) Natalia Kuznetzova Stirring the classification of Sphaeroceroidea or Heteromyzoidea David McAlpine Relationships and limits of the Pyrgotidae (Diptera: Schizophora:	A re-examination of the 'Chaoboriform' genera (Diptera: Chaoboridae) using larval morphological characters Joshua Ogawa The position of the subfamily Bruchomyiinae in the family Psychodidae Ruediger Wagner	Dolichopodidae in the canopy of lowland primary rainforest on the north coast of Papua New Guinea Patrick Grootaert Species groups within the genus Hilara (Empididae) in New Zealand Ian Andrew
	Tephritoidea) Valery Korneyev Aiming for a phylogenetic classification of the Lauxanioidea Stephen Gaimari Towards a phylogenetic classification of Syrphidae (Diptera) Sergey	Austrochironomus, a subgenus of <i>Chironomus</i> Meigen (Diptera: Chironomidae) Masaru Yamamoto Towards a phylogeny of <i>Tanytarsus</i> van der Wulp. Is morphology alone	The ultrastructure and function of the silk-producing basitarsus in the <i>Hilarini</i> (Diptera: Empididae) James Young
	Kuznetzov	sufficient to reconstruct the genealogical relationships between species in Chironomidae? Torbjorn Ekrem Revision of <i>Wyeomyia (Hystatomyia)</i> Dyar & Knab (Diptera: Culicidae) Jessica Adkins	A new species of Nemedina Chandler from mid-Asia (Diptera: Empidoidea) resolves the phylogenetic position of this enigmatic genus Bradley Sinclair Systematics of Nearctic Platypalpus Macquart (Empidoidea: Tachydromiinae) Jeffrey Cumming
3.00- 3.30	REFRESHMENTS - Student Union		
3.30- 5.00	CONTRIBUTED PAPERS - Systematics of Eremoneura Steel Building Room 206 (Chair: Margaret Schneider)	CONTRIBUTED PAPERS - General Medical and Veterinary Entomology Steel Building Room 309 (Chair: Marlene Elson-Harris)	WORKSHOP - Empidoidea Steel Building Room 309 (Chair: Marc Pollett)
	Recent advances in the study of the Asteiidae Amnon Freidberg A new look at the Milichiidae, and a revision of <i>Litometopa</i> Sabrosky (Diptera, Schizophora) Irina Brake	Biology and ecology of sand flies in new Z.C.L. foci in Semnan province, Iran Hadi Vatani New World screwworm sex pheromone: isolation and synthesis David Carlson	Phylogenetic relationships within the Empidinae (Empididae) Christophé Daugeron The world fauna of Rhamphomyia (Megacyttarus)
	Cladistic analysis of the genus Ceratitis MacLeay (Diptera, Tephritidae) Marc De Meyer A revision of Asilostoma Hendel, 1925 (Diptera, Lauxaniidae) Vera Cristina Silva	Risk-spreading larviposition behaviour of nasopharyngeal <i>Cephenemyia</i> (Diptera:Oestridae) parasites of deer John Anderson Host specific oestrids of deer repelled by non-host odours John Anderson	Miroslav Bartak Preliminary results of a revision of the Neotropical Neurigoninae (Dolichopodidae) Stefan Naglis
	Taxonomic revision of the Afrotropical species of the Eudorylini (Diptera: Pipunculidae) with discussion on special male genital characters Mihaly Foldvari	Ecology of sandflies in the main central foci of zoonotic cutaneous leishmaniasis of Iran Yaghoobi-Ershadi	Cladistic relationships of the subfamily Dolichopodinae Scott Brooks An overview of recent ecological research on

New concepts of Conopinae (Diptera: Conopidae) Margaret Schneider	African schistosomiasis host snails by predatory sciomyzid fly larvae Ray Miller Studies on the anti-bloodsucking	Dolichopodidae in Flanders (Belgium) Marc Pollet	
	measure against <i>Hirosia iyoensis</i> (Tabanidae) by tracking methods Mamoru Watanabe		
CONF Coaches Depart Kings Colle	ERENCE DINNER ON RIVER QUEEN ge at 6.15pm Coaches Depart R	liver Queen at 10.30pm	

Time	FRIDAY 4 OCTOBER		
8.10- 8.50	PLENARY SPEAKER - Steele Building Room 206 Mosquito-borne disease in Australia - an increasing concern? Richard Russell, University of Sydney (Chair: Scott O'Neill)		
09.00- 10.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes Steele Building Room 206 (Chair: Des Foley)	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Molecular identification of Anopheles and Culex mosquitoes Cathy Walton Mosquito control in Brisbane City Mike Muller Induced immunity against haemolymph proteins of Anopheles stephensi: effects on fecundity of mosquito and transmission blocking of malaria parasites Surendra Gakhar Insights into the population structure of the southwest Pacific malaria vector Anopheles farauti 2 (Diptera: Culicidae) by following ribosomal DNA spacer polymorphisms Nigel Beebe Molecular characterisation and species distribution of the Anopheles maculipennis complex in Iran Mehdi Sedaghat Effects of three plant extracts on eggs and larval development of Culex pipiens L. Ahmed Zaitoun	Keynote Address Diptera: Discovery and Dissemination in a Digital Domain (D5) Chris Thompson Embracing specimen-level databases: expectations and anxieties! Michael Irwin Meeting the interrelated challenges of specimen, nomenclature, and literature tracking with Mandala Gail Kampmeier	
10.30- 11.00	REFRESHMENTS - Student Union		
11.00-12.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes (continued) (Chair: Des Foley) and CONTRIBUTED PAPERS - Forensic Entomology (Chair: Ian Dadour) Steele Building room 206	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Botanical management of filarial vector, Culex quinquefasciatus Say Kadarkarai Murugan Evaluation of the effect of exposure to tannic acid and the entomopathogenic fungus Beauveria bassiana on the ecological competence of Anopheles stephensi Mohammad Saaid Dayer 10 minute break before start of next session CONTRIBUTED PAPERS - Forensic Entomology A preliminary survey of forensically important Diptera in Victoria, Australia Melanie Archer	Collection management and databasing at the Entomology Department of INBio, Costa Rica. Manuel Zumbado Mining the Dipteran genome: tools and resources from GenBank/EMBL and NCBI Brian Wiegmann Fauna Europaea - the Diptera component Thomas Pape Databasing European Dolichopodidae (Diptera) in the frame of Fauna Europaea Marc Pollet	

	Morphological and molecular identification of forensically important blow fly species (Diptera: Calliphoridae) from Taiwan Shiuh-Feng Shiao Blowflies associated with pig carcasses exposed in different environments and altitudes in Southeastern Brazil. Aricio Linhares The humble maggot in the 21st Century, a compendium of information Ian Dadour	Asilidae database - content, structure and accessibility Torsten Dikow A World catalogue of Pallopteridae (Diptera) Bernhard Merz Catalogue of the Craneflies of the World with a note on the work by C.P. Alexander (author of 11559 cranefly names) Pjotr Oosterbroek
1.15	CLOSING CEREMONY, AWARDING OF PRIZES AND INVI	TATION TO NEXT CONGRESS
1.15- 2.15	LUNCH - Student Union	

Information Disclaimer: The speakers, topics and times are correct at the time of publishing. In the event of unforeseen circumstances, the organisers reserve the right to alter or delete items from the Congress Program

5th International Congress of Dipterology Provisional Program

<u>Sunday 29 September</u> | <u>Monday 30 September</u> | <u>Tuesday 1 October</u> | <u>Wednesday 2 October</u> | <u>Thursday 3 October</u> | <u>Friday 4 October</u>

Time	SUNDAY 29 SEPTEMBER				
	4.00pm - REGISTRATION				
5.0	5.00pm - 7.00pm - WELCOME DRINKS - Student Union Heath/Holt				
	Rooms				
6pm V	6pm Welcome Address by David Yeates "Blowies, Mossies and the Great Aussie Salute"				

Time	MONDAY 3	0 SEPTEMBER	
8.00 -	REGISTRATION		
9.00- 9.30	WELCOME and OPENING ADDRESS - Steele Building Room 206 Welcome by David Yeates (Chair) Welcome to University of Queensland by Professor David Siddle (Deputy Vice-Chancellor (Research), University of Queensland) Geoff Garrett (CEO, CSIRO)		
9.30- 10.30	Diptera (Chair: Mike Irwin)		
	The influence of modern innovations on systematic inquiry, with emphasis on Diptera Michael Irwin Phylogenetic assessment: the advent of the Hennigian Philosophy Rudolf Meier Molecular biology: a set of new characters for phylogenetic assessment Brian Wiegmann Modern innovations in systematic inquiry Christine Lambkin		
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	Bioinformatics and the manipulation of biological information Jim Croft Web-based description and identification - what tools do we need? Kevin Thiele Geographical information systems: the spatial patterning of life David Peters Interpreting the fossil record of Diptera: the temporal patterning of life David Grimaldi Interpreting spatio-temporal patterns among select clades of Diptera Evert Schlinger The urgency to make all life known Ian Cresswell		
12.30- 1.30	LUNCH - Student Union		
1.30- 3.00 SYMPOSIUM - The Influence of Modern Innovations on Systematic Inquiry with Emphasis on Diptera (continued) (Chair: Mike Irwin) and SYMPOSIUM - Diptera in Biodiversity and Conservation 1 (Chair: Rudolf Meier) Steele Building Room 206		WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)	
	Diptera: a lot of flies yet to be discovered Chris Thompson	An overview of Horn Fly (Diptera: Muscidae) resistance surveys and research programs in the United States Fred Knapp	

RAM to rammed earth: a perspective from UNESCO Ian Cresswell

Concluding remarks, questions and discussion: Panel of Speakers David Yeates

2.15pm SYMPOSIUM - Diptera in Biodiversity and Conservation 1

Guild analyses in the study of dipteran biodiversity; a rationale and critique Roger Kitching

Diptera diversity on tree trunks Daniel Bickel

Australian glowworms (Diptera: Keroplatidae: Arachnocampa Spp.): identity, diversity, and management Claire Baker

Discovering and managing the patterns of life - from Field surveys of insecticide resistance in Australian buffalo fly Haematobia irritans exigua De Meijere (Diptera: Muscidae) Bill Farnsworth

> A summary of studies on the economic impact of horn flies Jerry Hogsette

Management and resistance of horn fly and buffalo fly: diagnostic techniques for metabolic resistance John Pruett

Management and resistance of horn fly and buffalo fly: diagnostic techniques for target site resistance Felix Guerrero

Movement of horn flies among cattle herds Ronnie **Bvford**

3.00-**REFRESHMENTS - Student Union** 3.30

3.30-SYMPOSIUM - Diptera in 5.00 **Biodiversity and Conservation**

Steele Building Room 206 (Chair: Dan Bickel)

Antler flies (Phytalmia, Tephritidae) are fascinating, but not bioindicators Gary Dodson

Sedges, mud and myriads of flies: the brachyceran fauna of sedge meadows in southern Canada Frederic Beaulieu

Chironomid communities (Diptera, Chironomidae) in cold alpine springs. Prospect for a long-term biomonitoring Elisabeth Stur

The dipteran fauna of a Central European mountain stream Ruediger Wagner

The method of the evaluation of antropogenic changes in the environment by means of the family Chloropidae (Diptera). Stepan Kubik

Habitat modification and dipteran biodiversity in central New Zealand Ian Andrew

Biodiversity patterns in Neotropical dolichopodid faunas (Diptera: Dolichopodidae) Marc Pollet

Status and geographical distribution of three endangered Karelian keroplatids (Diptera: Keroplatidae) Dimitri Bartenev

WORKSHOP - Hornfly Management and Resistance Steele Building Room 309 (Chair: Lane Foil)

Behaviour-modifying systems for the control of buffalo fly, Haematobia irritans exigua de Meijere (Diptera: Muscidae)

Rudolf Urech

Control of the horn fly and buffalo fly - past, present and future chemistries and strategies John Riner

The use of endectocides for horn fly control **James Hawkins**

Strategies for managing horn fly, Haematobia irritans, resistance Lane Foil

WORKSHOP - Sciomyzidae Steele Building Room 324 (Chair: Lloyd Knutson)

The struggle over reconstructing the phylogenetic relationships of the Sciomyzoidea (Diptera) Rudolf Meier

Morphodiversity and biodiversity in Sepedon Latreille and related genera: a lineage, a tribe, or a subfamily? (Diptera: Sciomyzidae) Lloyd Knutson

Sepedon knutsoni, a second oligochaete feeding sciomyzid from Africa Jean-Claude Vala

Predation and trail-following behaviour in selected marsh fly species (Diptera: Sciomyzidae) Rory Mc Donnell

5.00 -

HAPPY HOUR / POSTER VIEWING - POSTER AUTHORS TO BE PRESENT Student Union Heath/Holt **Rooms** FREE EVENING

PLENARY SPEAKER - Steele Bethylogenetic relationships of ne State University (Chair: Mon SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann) A genomic approach to phylogenetics: multiple gene systematics of the Drosophilidae Patrick D'Grady Significant incongruence can be informative: insights from partitioned support analyses Christine Lambkin Genes, fossils and morphology: combined data analysis and a revised time	The female reproductive morphological diversity reproductive tract in aca Marion Kotrba Female remating, opera arena of sexual selection. The labyrinth explored:	rm Olympics: Sperm c Female Choice and iour in Diptera ng Room 309 rion Kotrba) e tract in Diptera I: an trba e tract in Diptera II: and details of the female alyptrate Schizophora tional sex ratio, and the n Therese Markow	WORKSHOP - Muscidae Anthomyiidae Steel Building Room 32: (Chair: Adrian Pont) Diversity and taxonomy of catkin flies (Egle, Anthomyiidae) Graham Griffiths The plumosa group of Hydrophoria (Anthomyiidae) Masaaki Suwa
PLENARY SPEAKER - Steele Behylogenetic relationships of ne State University (Chair: Mon SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann) A genomic approach to Ohylogenetics: multiple gene Systematics of the Drosophilidae Patrick D'Grady Significant incongruence can be informative: insights from partitioned support analyses Christine Lambkin Genes, fossils and morphology: combined data analysis and a revised time	The female reproductive morphological diversity reproductive tract in aca Marion Kotrba Female remating, opera arena of sexual selection. The labyrinth explored:	rm Olympics: Sperm c Female Choice and iour in Diptera ng Room 309 rion Kotrba) e tract in Diptera I: an trba e tract in Diptera II: and details of the female alyptrate Schizophora tional sex ratio, and the n Therese Markow	WORKSHOP - Muscidae Anthomyiidae Steel Building Room 32: (Chair: Adrian Pont) Diversity and taxonomy of catkin flies (Egle, Anthomyiidae) Graham Griffiths The plumosa group of Hydrophoria (Anthomyiidae) Masaaki Suwa
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Set Analyses for Dipteran Phylogenetics Steele Building Room 206 (Chair: Brian Wiegmann) A genomic approach to phylogenetics: multiple gene systematics of the Drosophilidae Patrick D'Grady Significant incongruence can be informative: insights from partitioned support analyses Christine Lambkin Genes, fossils and morphology: combined data analysis and a revised time	Competiton, Cryptic Mating Behavi Steele Buildi (Chair: Mai The female reproductive introduction Marion Ko The female reproductive morphological diversity reproductive tract in aca Marion Kotrba Female remating, opera arena of sexual selection The labyrinth explored: organs, related structure	c Female Choice and flour in Diptera and Room 309 frion Kotrba) e tract in Diptera I: and trba e tract in Diptera II: and details of the female alyptrate Schizophora tional sex ratio, and the fin Therese Markow	Anthomyiidae Steel Building Room 32 (Chair: Adrian Pont) Diversity and taxonomy of catkin flies (Egle, Anthomyiidae) Graham Griffiths The plumosa group of Hydrophoria (Anthomyiidae) Masaaki Suwa
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morphology: combined data analysis and a revised time	organs, related structure	female sperm storage	
	The labyrinth explored: female sperm storage organs, related structures, and sperm storage patterns in the tephritid fly, Anastrepha suspensa. Ann Fritz Female remating, sperm displacement, remating speed, fertility, Drosophila ananassae Shree Ram Singh Non-antagonistic reproductive interactions between the sexes: offsetting the load of sexual conflict Lacey Knowles		A cladistic analysis of the Muscidae: first results - and problems Adrian Pon
scale for higher-level phylogeny of the Brachycera Brian Wiegmann			Muscidae (Diptera) of the Neotropical Region: taxonomy of the basal groups Claudio Carvalho
Molecular and morphological evidence supporting relationships within Eremoneura: focus on Cyclorrhapha Jeff Skevington			Muscidae (Diptera) of the Neotropical Region - taxonomy of the apical groups M ‡rcia Couri
Multiple data sets in addressing complex evolutionary questions within Diptera: case studies within Empidoidea and Simuliidae John Moulton In search of an outgroup for the Tanyderidae (Diptera): conflict or congruence?			A molecular phylogeny of the <i>Stomoxys</i> group based on cytochrome oxidase I. (Presented by Adrian Pont) Rosanna Giordano
	nion		IL
Dipteran Phylogeneti	ics (continued)	Steele Build	scidae, Anthomyiidae ding Room 324 Adrian Pont)
SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier)			
	Multiple data sets and syrphid phylogenetics Gunilla Stahls-Makela Phylogeny of Syrphinae (Diptera, Syrphidae) on the		
:h :co D a	e Tanyderidae (Diptera): nflict or congruence? arlene Judd EFRESHMENTS - Student Unit of the Symposium - Multiple Da Dipteran Phylogenetic (Chair: Brian William of the Symposium - Diptera in Conservatic (Chair: Rudolf Steele Building untiple data sets and syrphid pultiple data	e Tanyderidae (Diptera): nflict or congruence? arlene Judd EFRESHMENTS - Student Union SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206 ultiple data sets and syrphid phylogenetics Gunilla cahls-Makela	e Tanyderidae (Diptera): nflict or congruence? arlene Judd EFRESHMENTS - Student Union SYMPOSIUM - Multiple Data Set Analyses for Dipteran Phylogenetics (continued) (Chair: Brian Wiegmann) and SYMPOSIUM - Diptera in Biodiversity and Conservation 3 (Chair: Rudolf Meier) Steele Building Room 206 Ultiple data sets and syrphid phylogenetics Gunilla ahls-Makela Phylogeny of the genus Muscidae) based on molevidence. Jade Savage

	Combining molecular and morpl Sepsidae, Coelopidae, and Diop congruence Rudolf Meier		Comparison of the cutic Musca spp. worldwide (I	
	Phylogeny of the small headed-flies (Diptera: Acroceridae) using multiple molecular markers Shaun Winterton 15 minute break before start of next session			
	SYMPOSIUM - Diptera ir Conservati			
	An estimate of dipteran species David Yeates	- richness in Australia		
12.30- 1.30	LUNCH - Student Union			
1.30- 3.00	SYMPOSIUM - Diptera in Biodiversity and Conservation 3 Steele Building Room 206 (Chair: Rudolf Meier)	Steele Buildi	ement of Tephritidae ing room 309 ick Drew)	WORKSHOP - Systematics and Ecology of Oestroidea + Hippoboscoidea Steele Building Room 324 (Chair: James O'Hara)
	Nearctic Diptera: what we know and what we do not Chris Thompson The Afrotropical Diptera - an overview Brian Stuckenberg Neotropical Diptera biodiversity: an overview Dalton De Souza Amorim	Guinea and Australia Gary Dodson Sexual selection in a tropical fruit fly: role o plant derived chemical in mate choice S Rag Geographical distribution and seasonal abundance of pest fruit flies in Papua New Guinea David Putulan		Advances in the phylogenetics of the Tachininae (Tachinidae) James O'Hara A review of New World Zaira Robineau-Desvoidy (Diptera; Tachinidae; Blondeliini) Dan Hansen Louse-flies (Diptera:
	Dipteran biodiversity of the Gal‡pagos Islands (Ecuador) Bradley Sinclair Hawaii as a Diptera biodiversity Hot Spot: a helluva lot of halteres in the Hawaiian Islands Neal Evenhuis New Zealand Diptera: diversity	isozyme and Larval Serubanding patterns in the cucurbitae Coq. (Dipterareference to irradiation tesmin	melon fly <i>Bactrocera</i> a: Tephritidae) with	Hippoboscidae) in the Central Black Soil Region of Russia Sergey Gaponov
	and scope for further studies Rod Macfarlane			
3.00- 3.30	REFRESHMENTS - Student U	nion		
3.30- 5.00	SYMPOSIUM - Diptera in Biodiversity and		Steele Buil	P - Agromyzidae ding Room 309 avid Henshaw)
	Assessing species richness of Dicollections Frederik Petersen	iptera using museum	Tribute to Kenneth Spencer	
	Extrapolating from the observed revision to its 'true' species dive using <i>Euscelidia</i> (Asilidae: Dipte	ersity. A case study era) Torsten Dikow	The phylogeny of Agrom morphological character Mine density, parasitism leafminers, <i>Liriomyza ci</i>	s Martin Dempewolf and emergence of the
	Spectacular diversity in <i>Cladoch</i> anomalous or typical for Neotro David Grimaldi		Liriomyza bryoniae (Kali	t.) (Diptera: Agromyzidae), d beans in Egypt. Samir El-

II I	Why are there so many genera of Chloropidae? Terry	Seasonal fluctuations of the wheat leafminer,
	Wheeler	Agromyza nigrella (Rondani) (Diptera: Agromyzidae), and parasitism in Lower and Middle
11 1	The diversity of neotropical Micropezidae Steve Marshall	Egypt. Samir El- Serwy
		Revision of nearctic species of Cerodontha
	Biodiversity studies of Namibian Diptera - a developing country approach Ashley Kirk-Spriggs	(Cerodontha) (Diptera: Agromyzidae) with additional notes on other subgenera Stephanie
	goana, approach rising, then opings	Boucher Subgenera Stephanie
		A CD-ROM on Agromyzidae of economic significance Martin Dempewolf
		Feeding habits and the so called phytophagy of Chloropidae (Diptera) Michael von Tschirnhaus
7.00	DINNER AT AUSTRALIAN WOOLSHED Coaches	depart from Kings College 6.15pm Coaches
	depart Woolshe	d at 10.30pm

Time	WEDNESDAY 2 OCTOBER	
	PLENARY SPEAKER - Steele Building Room 206 The fossil history of associations between the Dipte Smithsonian Institution (Chair: Brian Stucken)	
09.00- 10.30	CONTRIBUTED PAPERS - Fossils and Biogeography (Chair: Conrad Labandeira) and CONTRIBUTED PAPERS - Evolution and Biology (Chair: Gary Taylor) Steele Building Room 206	CONTRIBUTED PAPERS - Behaviour and Physiolog Steele Building Room 309 (Chair: Gary Dodson)
	Origin of main evolutionary lineages of the Diptera - fossil evidences Wieslaw Krzeminski	Regulation of bioluminescence in Australian glow-worms David Merritt
	How recent are the Empidoidea of Baltic amber? Hans Ulrich Amphipacific disjunctions in net-winged midges (Diptera: Blephariceridae) Peter Zwick 15 Minute break before start of next session CONTRIBUTED PAPERS - Evolution and Biology The Fergusoninidae: co-evolution between gall-flies, nematodes and their myrtaceaous hosts. Gary Taylor New Zealand robber flies: phenology and biogeography Rod Macfarlane	Chemical cues regulate oviposition site selection in the midge Chironomus tepperi Skuse (Chironomidae) Mark Stevens Different female ovipositing strategies in tephritid species of the family Tephritidae (Diptera) in Centaurea scabiosa (Asteraceae) - central Europe Judita Kinkorova Flies that attack polymorphic snails on coloured backgrounds: selection for crypsis by a sarcophagid parasitoid of the marine snail Littoraria filosa Steve McKillup
10.30- 11.00	REFRESHMENTS - Student Union	
11.00- 12.30	CONTRIBUTED PAPERS - Evolution and Biology Steele Building Room 206 (Chair: Gary Taylor)	WORKSHOP - Cecidomyiidae Steele Building Room 309 (Chair: Junichi Yukawa)
	Evolution of the sclerotised plant-piercing oviscapt in <i>Thrypticus</i> (Diptera: Dolichopodidae) Daniel Bickel	Facultative competition between two gall-midge species (Cecidomyiidae) on <i>Suaeda monoica</i> (Chenopodiaceae) Netta Dorchin
	Do Wolbachia infections obscure phylogeographic patterns of the European cherry fruit fly? Markus	Synchronization of gall midge emergence with host plan phenology Junichi Yukawa

12.30-	Riegler Fly pollination and plant breeding systems: are flies good pollinators? Chris Borkent On the natural history and all life-history stages of the only European stalk-eyed fly, Sphyracephala europaea (Diopsidae: Diptera). Mihaly Foldvari The immature stages of soldier-flies (Diptera, Stratiomyidae) in South America - new reports and biodiversity Jose Roberto Pujol Luz Sex, flies and videotape: pollination and sexual deception in the Australian terrestrial orchid Pterostylis Joanna Hamilton Understanding the evolution of insect: microbe associations using Drosophila melangaster whole genome microarrays Elizabeth McGraw	The gall midges (Cecidomyiidae) of Carya (Juglandaceae) in the Nearctic Region Raymond Gagne Pupal characteristics of the Japanese Asphondylia gall midges (Diptera: Cecidomyiidae) and their species identification by DNA sequencing Nami Uechi Morphology and a preliminary phylogenetic analysis of immatures of Neotropical Asphondyliini genera (Diptera: Cecidomyiidae) Dalton De Souza Amorim Inter- and intraspecific comparison among Asteralobia gall midges (Diptera: Cecidomyiidae) on Ilex species (Aquifoliaceae): sympatric vs. allopatric speciation Makoto Tokuda Zoophagous gall midges of the Italian fauna (Diptera: Cecidomyiidae) Mario Solinas
1.30	LUNCH - Student Union	
1.30- 3.00	SYMPOSIUM - Digital Diptera: Fly Identification in the New Millennium Steele Building Room 206 (Chair: Steve Marshall)	CONTRIBUTED PAPERS - Systematics of Simuliidae Steele Building Room 309 (Chair: Sixto Coscarón)
	Fly identification: crisis, revolution or evolution? Steve Marshall	Do the Neotropical <i>Simulium</i> subgenera constitute a monophyletic taxon? Daniel Rafael Miranda-Esquivel
	An interactive key to fly families: from Australia to the world! David Yeates	A cladistic definition of <i>Simulium (Ectemnaspis)</i> and <i>S. (Psilopelmia) subgenera</i> (Diptera: Simuliidae) Sixto Coscarón
	Simplified digital photography for museum work Stephen Gaimari	Systematics of black flies (Diptera: Simuliidae) in Thailand Suwannee Phayuhasena
	Identification: some basics and their implications for digital solutions Chris Thompson	Taxonomic revision and cladistic analisis of <i>Simulium</i>
	DORSALIS - an interactive key to fruit flies of the Bactrocera (Bactrocera) dorsalis complex Amy Lawson	(Hearlea) Vargas, Martínez Palacios & Díaz Nájera (Diptera: Simuliidae) Sixto Coscarón
	Identification of flies (Diptera) and other insects by general audiences using digital technologies: unlimited access to illustrations Riley Nelson	
3.00- 3.30	REFRESHMENTS - Student Union	
3.30- 5.00	CONTRIBUTED PAPERS - Phylogeny of Lower E Steele Building Room 206 (Chair: Brad Sinclain	
	From polyphyly to biogeography of Thereva (Asiloid New molecular and morphological evidence for the p (Diptera, Therevidae) Martin Hauser The Exoprosopini, Australia and the world: revelation A phylogenetic analysis of Bibionidae Scott Fitzger The main clades of Sciaridae (Diptera) Pekka Vilka	phylogenetic placement of <i>Phycini</i> and <i>Xestomyzini</i> ons from systematic studies Christine Lambkin rald
5.00- 6.00	OPEN COUNCIL MEETING Steele Building Roon	1 206
6.00- 7.00	HAPPY HOUR - FREE EVENING	

	Time	THURSDAY 3 OCTOBER
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8.50			
9.00- 10.30	WORKSHOP - Development (Chair: David Merritt) and SYMPOSIUM - The Genetics of Biological Invasions (Chair George Roderick) Steele Building Room 206	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building 309 (Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology of Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman)
	Evolution of embryonic axis specification in Diptera Urs Schmidt-Ott	The biogeographical relationships of the Acroceridae of Africa, Madagascar and South America Evert Schlinger	Phylogeny of Chrysomyine blow flies Hiromu Kurahas Biodiversity of sarcophagid,
	Influential Passengers: Inherited Wolbachia infections of insects Scott O'Neill	New insights into the palaeogeography and breakup of Gondwana, and some associated biogeographical topics Brian	calliphorid and muscid flies (Diptera) of Sundarbans Biosphere Reserve, India Bhanu Chandra Nandi
	10 Minute break before next Session SYMPOSIUM - The Genetics of Biological Invasions	Stuckenberg African biogeography patterns - an introduction Ashley Kirk-Spriggs	The evolution of ectoparasitism in calliphorid blowflies Jamie Stevens
	Introduction George Roderick Genetic tools for studying invasive Diptera Andrew Bohonak	The distributional patterns for neotropical / afrotropical / autralo-oriental <i>Simulium</i> Latreille (Diptera: Simuliidae) subgenera Daniel Rafael Miranda-Esquivel	Flesh flies (Sarcophagidae) from southern Appalachian mountain summits: rare species, rare sites, and human encroachment Greg
	Tracking the spread of the invasive horn and buffalo flies, <i>Haematobia irritans irritans</i> and <i>H. i. Exigua</i> , using cytochrome oxidase I and <i>Wolbachia</i> Rosanna Giordano (Presented by Adrian Pont)	Biogeography of Afrotropical Chironomidae (Diptera) Torbjorn Ekrem The phylogenetic relationships of <i>Archaeochlus</i> Brundin, <i>Austrochlus</i> Cranston and <i>Afrochlus</i> Freeman (Diptera: Nematocera), basal chironomid genera with a Gondwanan connection Jon Martin	Molecular systematics and identification of Australian carrion-breeding blowflies James Wallman
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	SYMPOSIUM - The Genetics of Biological Invasions Steele Building Room 206 (Chair: George Roderick)	CONTRIBUTED PAPERS - African Diptera: Biogeography and Gondwanaland Steele Building Room 309 Chair: Ashley Kirk-Spriggs)	WORKSHOP - Biology of Calliphoridae and Sarcophagidae Steele Building Room 32 (Chair: James Wallman)
	Medfly (<i>Ceratitis capitata</i>) bioinvasions of California Giulliano Gasperi Inferring the source of outbreak populations of Queensland fruit fly Stuart Gilchrist	The present state of taxonomy and biogeography of the Heleomyzidae and Trixoscelididae in the Afrotropical Region. A.J. Woznica (Presented by Ashley Kirk-Spriggs)	Sarcophaga megafilosia and S. meiofilosia: flesh fly parasitoids of marine snails Central Queensland mangroves Thomas Pape
	Diptera invasions in South Pacific islands: consequences for public health Neil Davies	Zoogeographical distribution of Afrotropical species of <i>Atherigona</i> Rondani (Diptera: Muscidae) Michael Chidoze Dike	The joint post feeding radial larval dispersal in flies of genus <i>Chrysomya</i> : weight, depth and distance for
	Are flies model insect invaders? Genetics, ecology, behavior, and adaptation George Roderick	Southern African Empidoidea (Diptera): phylogenetic patterns and biogeographic implications Bradley Sinclair	pupation Leonardo Gomes
		African Mythicomyiidae (Diptera) - biogeographic Implications of a	

	diverse group of flies Neal Evenhuis		
12.30- 1.30 LUNCH - <i>Student Union</i>			1
1.30- 3.00	CONTRIBUTED PAPERS - Phylogeny of Cyclorrhapha Steel Building Room 206 (Chair: Christine Lambkin)	CONTRIBUTED PAPERS - Systematics of Lower Diptera Steel Building Room 309 (Chair: Greg Courtney)	WORKSHOP - Empidoidea Steel Building Room 324 (Marc Pollett)
	The main clades of the Sphaeroceridae (Diptera) Natalia Kuznetzova Stirring the classification of Sphaeroceroidea or Heteromyzoidea David McAlpine Relationships and limits of the Pyrgotidae (Diptera: Schizophora: Tephritoidea) Valery Korneyev Aiming for a phylogenetic classification of the Lauxanioidea Stephen Gaimari Towards a phylogenetic classification of Syrphidae (Diptera) Sergey Kuznetzov	A re-examination of the 'Chaoboriform' genera (Diptera: Chaoboridae) using larval morphological characters Joshua Ogawa The position of the subfamily Bruchomyiinae in the family Psychodidae Ruediger Wagner Austrochironomus, a subgenus of Chironomus Meigen (Diptera: Chironomidae) Masaru Yamamoto Towards a phylogeny of Tanytarsus van der Wulp. Is morphology alone sufficient to reconstruct the genealogical relationships between species in Chironomidae? Torbjorn Ekrem Revision of Wyeomyia (Hystatomyia) Dyar & Knab (Diptera: Culicidae) Jessica Adkins	Dolichopodidae in the canopy of lowland primary rainforest on the north coast of Papua New Guinea Patrick Grootaert Species groups within the genus Hilara (Empididae) in New Zealand Ian Andrew The ultrastructure and function of the silk-producing basitarsus in the Hilarini (Diptera: Empididae) James Young A new species of Nemedina Chandler from mid-Asia (Diptera: Empidoidea) resolves the phylogenetic position of this enigmatic genus Bradley Sinclair Systematics of Nearctic Platypalpus Macquart (Empidoidea: Tachydromiinae) Jeffrey Cumming
3.00- 3.30	REFRESHMENTS - Student Union		
3.30- 5.00	CONTRIBUTED PAPERS - Systematics of Eremoneura Steel Building Room 206 (Chair: Margaret Schneider)	CONTRIBUTED PAPERS - General Medical and Veterinary Entomology Steel Building Room 309 (Chair: Marlene Elson-Harris)	WORKSHOP - Empidoidea Steel Building Room 309 (Chair: Marc Pollett)
	Recent advances in the study of the Asteiidae Amnon Freidberg A new look at the Milichiidae, and a revision of Litometopa Sabrosky (Diptera, Schizophora) Irina Brake Cladistic analysis of the genus Ceratitis MacLeay (Diptera, Tephritidae) Marc De Meyer A revision of Asilostoma Hendel, 1925 (Diptera, Lauxaniidae) Vera Cristina Silva Taxonomic revision of the Afrotropical species of the Eudorylini (Diptera: Pipunculidae) with discussion on special male genital characters Mihaly Foldvari	Biology and ecology of sand flies in new Z.C.L. foci in Semnan province, Iran Hadi Vatani New World screwworm sex pheromone: isolation and synthesis David Carlson Risk-spreading larviposition behaviour of nasopharyngeal Cephenemyia (Diptera:Oestridae) parasites of deer John Anderson Host specific oestrids of deer repelled by non-host odours John Anderson Ecology of sandflies in the main central foci of zoonotic cutaneous leishmaniasis of Iran Yaghoobi-Ershadi	Phylogenetic relationships within the Empidinae (Empididae) Christophé Daugeron The world fauna of Rhamphomyia (Megacyttarus) Miroslav Bartak Preliminary results of a revision of the Neotropical Neurigoninae (Dolichopodidae) Stefan Naglis Cladistic relationships of the subfamily Dolichopodinae Scott Brooks An overview of recent ecological research on

0,2020		our international Diptorology Comorones	
	New concepts of Conopinae (Diptera: Conopidae) Margaret Schneider	Biological and natural control of African schistosomiasis host snails by predatory sciomyzid fly larvae Ray Miller	Dolichopodidae in Flanders (Belgium) Marc Pollet
		Studies on the anti-bloodsucking measure against <i>Hirosia iyoensis</i> (Tabanidae) by tracking methods Mamoru Watanabe	
	CONFERENCE DINNER ON RIVER QUEEN Coaches Depart Kings College at 6.15pm Coaches Depart River Queen at 10.30pm		

Time	FRIDAY 4 OCTOBER		
8.10- 8.50			
09.00- 10.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes Steele Building Room 206 (Chair: Des Foley)	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Molecular identification of Anopheles and Culex mosquitoes Cathy Walton Mosquito control in Brisbane City Mike Muller Induced immunity against haemolymph proteins of Anopheles stephensi: effects on fecundity of mosquito and transmission blocking of malaria parasites Surendra Gakhar Insights into the population structure of the southwest Pacific malaria vector Anopheles farauti 2 (Diptera: Culicidae) by following ribosomal DNA spacer polymorphisms Nigel Beebe Molecular characterisation and species distribution of the Anopheles maculipennis complex in Iran Mehdi Sedaghat Effects of three plant extracts on eggs and larval development of Culex pipiens L. Ahmed Zaitoun	Keynote Address Diptera: Discovery and Dissemination in a Digital Domain (D5) Chris Thompson Embracing specimen-level databases: expectations and anxieties! Michael Irwin Meeting the interrelated challenges of specimen, nomenclature, and literature tracking with Mandala Gail Kampmeier	
10.30- 11.00	REFRESHMENTS - Student Union		
11.00- 12.30	CONTRIBUTED PAPERS - Medical and Veterinary Entomology: Mosquitoes (continued)	SYMPOSIUM - Cataloguing and Databasing Steele Building Room 309 (Chair: Thomas Pape)	
	Botanical management of filarial vector, Culex quinquefasciatus Say Kadarkarai Murugan Evaluation of the effect of exposure to tannic acid and the entomopathogenic fungus Beauveria bassiana on the ecological competence of Anopheles stephensi Mohammad Saaid Dayer 10 minute break before start of next session CONTRIBUTED PAPERS - Forensic Entomology A preliminary survey of forensically important Diptera in Victoria, Australia Melanie Archer	Collection management and databasing at the Entomology Department of INBio, Costa Rica. Manuel Zumbado Mining the Dipteran genome: tools and resources from GenBank/EMBL and NCBI Brian Wiegmann Fauna Europaea - the Diptera component Thomas Pape Databasing European Dolichopodidae (Diptera) in the frame of Fauna Europaea Marc Pollet	

	Morphological and molecular identification of forensically important blow fly species (Diptera: Calliphoridae) from Taiwan Shiuh-Feng Shiao Blowflies associated with pig carcasses exposed in different environments and altitudes in Southeastern Brazil. Aricio Linhares The humble maggot in the 21st Century, a compendium of information Ian Dadour	Asilidae database - content, structure and accessibility Torsten Dikow A World catalogue of Pallopteridae (Diptera) Bernhard Merz Catalogue of the Craneflies of the World with a note on the work by C.P. Alexander (author of 11559 cranefly names) Pjotr Oosterbroek	
12.45- 1.15	CLOSING CEREMONY, AWARDING OF PRIZES AND INVI	CEREMONY, AWARDING OF PRIZES AND INVITATION TO NEXT CONGRESS	
1.15- 2.15	LUNCH - Student Union		

Information Disclaimer: The speakers, topics and times are correct at the time of publishing. In the event of unforeseen circumstances, the organisers reserve the right to alter or delete items from the Congress Program