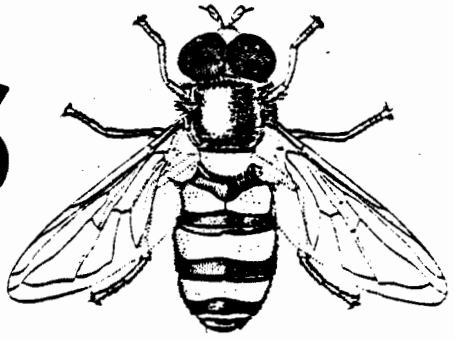
# Syrphos



A Newsletter for Syrphidae (Diptera) workers,
compiled by F. Christian Thompson

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SYRPHOS is a newsletter for and about syrphid workers. The purpose of SYRPHOS is to increase communication among people interested in syrphids and, thereby, to promote work on these flies. The newsletter includes information on workers, their collections, publications, and on-going research. Exchanges and address notices are also included. SYRPHOS is not a scientific publication and does not include formal nomenclatural actions.

The third issue of SYRPHOS continues the style and format of the first. Thanks are due to all who have responded with information. I apologize for not passing it on sooner. Remember information is the basis of a newsletter. For those who have written, please continue to do so, and for those who have not, please let me hear from you.

## PROFILE

Under this heading, short sketches of syrphid workers are included. These sketches are prepared by the subject. All submitted sketches will be included as space permits.

### Ernst Torp Pedersen

I was born on 5 June 1929 in Torp, Aulum, in the western part of Jutland, Denmark. As early as I can remember, I was interested in natural history, especially in birds. I worked on the farm where I was born until I was sixteen and spent my leisure time bird-banding. In 1950, I got a Higher School Certificate and began the study of Zoology at the University of Copenhagen under the leadership of the late Professor R. Sparck. I specialized in birds (Palaearctic Fringillidae) and studied Crossbills. In 1957, I graduated from the University with a Masters of Science degree and became a teacher at the secondary school of Maribo on Lolland in the southeastern part of Denmark, but in the sping of 1959 I moved to Jelling in the southeastern part of Jutland, - an old royal residence in one of the most beautiful natural areas of Denmark. Here I became a lecturer in Biology at the Teachers Training College. During the first summer in Jelling, I began to collect all sorts of insects, especially Diptera, and my interest in Syrphidae started. First and foremost, it was reinforced by the help and guidance given by my friend from my secondary school period, the famous Dipterologist, Dr. Leif Lyneborg of the Zoological Museum in Copenhagen.

I soon concentrated on Syrphidae and have collected in the last 20 years about 35, 000 specimens in all parts of Denmark. I have also established the greatest collection of syrphid flies in the northern part of Europe. Much material has been collected in various European countries, such as Spain, Italy, Greece, Austria, Switzerland, West Germany, Sweden and Norway. The collection contains about 1,100 different species from all the zoogeographic regions of the world.

In 1973, I was appointed adviser and inspector for the Ministry of Education. I also do much work on Nature-Conservation. I am married, and we have a son, Ole, eleven-years old. Esther, my wife, often gives me much valuable help with collecting.

For the moment, I am working with the syrphid fauna of 14 spring areas in Jutland and of small lakes in the dunes on the west coast of Jutland. I am also working out the syrphid sections for the Fauna Entomologica Scandinavica series, but this will take some years. I have plans for a catalogue of the Syrphidae of Europe with the distributional data for each country given on a zoogeographic and ecological basis.

I have exchanged material with many people and hope to continue to do so, still with the advantage for both parties.

Ernst is modest, his write-up doesn't do justice to his great achievements. In Kyoto, Japan, this summer I discovered another facet of his genius - his students. There Dr. Nils Mors Andersson, the world authority on Gerridae (Aquatic Hemiptera) told me that Torp was his secondary school teacher and was responsible for his interests in entomology.

Ernst to me is the great modern syrphid collector, but more than this Ernst has tried to build a sense of community among European syrphid workers. In my early struggles with Palaearctic Syrphidae, I quickly discovered that Ernst was the man who knew everything that was going on in Europe. From our early correspondence arose the Palaearctic Syrphidae Catalog Project, which has now grown into a much more grandiose dream. Also, contrary to the published account (KGV Smith, 1978, Antenna 2: 116), SYRPHOS was first hatched in Jelling, not London. I merely carried the idea to London where it was seconded. Unfortunately, Torp's great responsibilities with the Danish Government prevents him from taking a more active part in SYRPHOS.

Ernst Torp Pedersen has asked that the correct forms of his name be used, which are Ernst Torp, E. Torp, or E. Torp Pedersen, but never Pedersen alone (without the Torp).

A list of Torp's publications on syrphids is given under the recent literature section.

## Nickolai Alexandrovitch Violovitch

Nickolai Alexandrovitch Violovitch was born in Moscow on 21 May 1913 of Russian ancestry. In 1933, he graduated from the First Moscow State University and until 1950 was working in microbiology, bacteriology and parasitology. Between 1950-1960, he was concerned with the fauna and ecology of fleas, ixodid ticks, gamasid mites, tabanid and syrphid flies from the Kamchatka Peninsula, Commander and Kuril Islands and Sakhalin Island. The results of the data obtained were the basis of his thesis, "Fauna of Syrphidae (Diptera, Syrphidae) of Sakhalin and Kuril Islands and its origin", defended by him at the Zoological Institute of the Academy of Sciences in 1956, when the degree of candidate of biological sciences was conferred on him. Between 1960-1971, he studied Syrphidae and a complex of blood-sucking insects of Siberia and gnu-preventing measures. During this period the monographs "Blackflies of Tuva (Diptera, Simuliidae)", a joint publication with Professor I. A. Rubtsov, and "Tabanidae of Siberia (Diptera, Tabanidae)" were published. For this monographic work the doctorship was conferred on him in 1969.

At present, Dr. N. A. Violovitch realizes the fundamental investigation "Syrphidae of Siberia and the Far-East". The first volume identifies approximately 100 genera and 600 species of hover flies (narcissus flies), known from the Urals to the Kuril islands and Chukotka. This volume rich in figures will be approximately complete by the end of 1981 - early 1982. The second volume will involve the process of the formation of faunas of this region and its zoogeographic analysis. Dr. N. A. Violovitch has described 2 genera and 177 species of hover (narcissus) flies, 2 species and 2 subspecies of fleas, 3 species of blackflies (Simuliidae)(jointly with Prof. I. A. Rubtsov), and 2 species of gad-flies (Tabanidae). Thirteen species are named after him.

The above write-up was prepared by Mr. Ar. Barkalov, a student of Dr. Violovitch. A list of Dr. Violovitch's syrphid publication is given in the recent literature section.

## COLLECTIONS

Under this heading, information about collections of interest to syrphid workers is included.

### Syrphidae in the Canadian National Collection of Insects (CNC).

I will begin with a digression - an explanation why the Canadian National Collection of Insects (and of Arachnids and Nematodes) is in the Department of Agriculture rather than in the National Museum of Natural History (where the research collections of other groups of animals are housed). During the First World War it was noticed that both organizations had small insect collections and it was decided that they be combined in the Museum. Before this was done the Parliament Buildling in Ottawa was destroyed by fire, so Parliament met in the National Museum during the rebuilding, and in order to create as much space as possible the Museum insect collections were sent to Agriculture. They have been there since that time.

The very small collection of Diptera that existed at the time of this merger was greatly increase, from 1923 to 1928, by the efforts of C. H. Curran, the first Dipterist employed by the Department of Agriculture. Most of his collecting was in eastern Canada and in Kansas. His colleagues, particularly G. S. Walley, also collected many Syrphidae during the 1920's, and much other Canadian material, particularly from British Columbia and Manitoba, was added by the applied entomologists employed by Agriculture. (I regret that so few applied entomologist of the present time follow the lead of their predecessors). The collection grew more slowly from 1928 to 1948. In 1948 two significant events occurred. G. P. Holland became the director of the Systematic Entomology Unit (now, with the inclusion of botanists and mycologists, the Biosystematics Research Institute) and began to increase the staff of insect taxonomists (from eight in 1948 to about 20 in 1955 and 29 in 1980). At the same time the Canadian Northern Insect Survey was begun. It was a joint project of the Canadian Departments of Agriculture and Defense, and had as its primary purpose an assessment of the biting fly populations of northern Canada. Fortunately, however, the people engaged in the survey (taxonomists from Ottawa plus many students employed for the summer) were encouraged to collect insects of all orders. The result was that hundreds of thousands of arctic and subarctic insects were added to the CNC. At least half of these were Diptera, which make up perhaps half the species of insects in the subarctic and perhaps 2/3 in the arctic. Unfortunately Chironomidae and Muscidae (and probably Mycetophilidae) greatly outnumber Syrphidae in the Arctic. During the late 1940's and early 1950's most of our field parties were in arctic and subarctic Canada; in later years they have also been in southern Canada, several parts of the United States, northern and southern Mexico, and Nepal. Another digression (and a bit of tub-thumping) - in 1951 I undertook our first foreign expedition - 2 1/2 months in Swedish Lapland (mostly at Abisko). I sometimes regret that my interests at that time were primarily in Nematocera, particularly Chironomidae and Culicidae, so that I collected only those Syrphidae that fell into my net. But one is always wise after the event - I feel now, 29 years later, that a summer in Abisko would be much more profitable than the previous one. It is also interesting to note that the summer of 1951 was the wettest ever recorded in Abisko; my colleague, W. R. Mason, collected there for a few weeks in 1960 during the driest summer ever recorded. (No doubt the safest place to collect is Mt. Wialeale, Kauai, Hawaii, with an average rainfall of over 450 inches per year, although I have been told by a resident of Kauai that he is sure that if they placed the gauge about a mile away the records might average about 100 inches more). I regret very much that Syrphidae have not reached Hawaii until recently (almost certainly since Captain Cook's discovery), and have therefore not produced the endemic species swarm found particularly in Drosophilidae, Dolichopodidae and Muscidae. One of my colleagues (I have fortunately forgotten which one) once said to me "The Hawaiian fauna does not interest me - it is an evolutionary dead end - nothing that has

evolved there has ever reached any of the continents". Whenever I think of this I am appalled - just think of what a swarm of 100 - 1000 species of a genus of Syrphidae would indicate of the evolutionary potential of the group. Fortunately South America seems to have an "island fauna" of Syrphidae (and probably of all Diptera more recent than the more primitive Brachycera) so that "species swarms" of Toxomerus, Allograpta, Ocyptamus, Copestylum and Palpada do occur there.

During the period 1950-70 several hundred thousand Diptera, including many thousands of Syrphidae, were purchased from L. Peña, who collected in southern and western South America, and from F. Plaumann, who collected in southern Brazil. One other significant purchase of miscellaneous Diptera was of some 35,000 specimens, including over 1,000 Syrphidae, collected by H. Falke in Uganda and Zaire in the 1970's. In 1973 the F.M. Hull collection of Diptera was purchased; incorporation of the 13,000 Syrphidae in this collection into the CNC is still continuing. One other collector should be mentioned. The late J.W. Boyes of McGill University, who published extensively on syrphid cytotaxonomy, deposited in the CNC his extensive collections which covered all major geographic areas except the mainland of Asia. Much material, especially Palaearctic, has been obtained by exchange; this includes over 300 species (many from the U.S.S.R. east of the Urals) received from the late Prof. A. A. Stackelberg.

The CNC contains specimens of over 2500 species which are either identified or segregated but unnamed. There are also many unstudied specimens, but most are sorted to genus. The total number of specimens is approximately 132,000. Coverage is best for Canada, Chile, U.S.A., and western Europe (in that order), but there are also significant collections from Mexico, Ecuador, Peru, Bolivia, northwestern Argentina, southern Brazil, Uganda and Nepal, as well as smaller collections from many other areas. Even the European part of the collection is likely to contain valuable material (see for example Dusek and Laska 1973, Descriptions of five new European species of the genus Metasyrphus, Acta ent. bohemoslov. 70: 415-226). Reasonable requests for loans of material from any area for revisional studies are invited. Exchange of specimens is also desired.

The collection contains 94 holotypes of Curran species, 124 holotypes of Hull species, and 22 holotypes of species described by other authors. (A catalogue of Diptera types in the CNC is being prepared). There are also paratypes of many other species, especially of those described by Hull. Also present are specimens of several hundred species which I have compared with types in many European and North American collections.

The collection of immature specimens is small. It consists mostly of dry puparia associated with adults, and includes most of the puparia described by Heiss (1938, Ill. Biol. Monogr. 16(4)).

J. R. Vockeroth, 28 August 1980.

RESEARCH

Progress on major projects of interest to syrphid workers is reported under this heading. Since the last newsletter little significant progress has been made.

EDITORIAL

Points of views of interest to syrphid workers are present under this heading.

EXCHANGES

Worldwide: U. S. National Museum is willing to exchange syrphids will all. The Museum would like to build the best syrphid collection in the World. Hence, all exchanges inquiries are welcome. List of species available for exchange and desired in return, is available on inquiry. Write F. Christian Thompson, Dept. of Entomology, Smithsonian Inst., NHB-168, Washington, D. C. 20560 USA.

CORRESPONDENCE

Under this heading, reports or excerpts of letters from correspondents are included. All submitted material is included with the minimal amount of editing. English is preferred, but most other languages are accepted.

A. V. Barkalov: Mr. Barkalov is a student of Dr. N. A. Violovich and is working on the Siberian species of Cheilosia. He writes - "I am now finishing up work on the material of Siberian Cheilosia of group C."

Claus Claussen: "I would be interested in knowing whether translations exist of Russian syrphid papers, and whether xerox copies from them are available for purchase. I think many syrphid workers are interested in such translations, especially of taxonomic papers. Maybe it is possible to stir up a discussion in the next issue of SYRPHOS, on how to get Russian papers translated in English. I am continuing my faunistic investigation on northern German Syrphidae."

A English translation of the Russian journal "Entomologicheskoe Obozrenie" is published in U.S.A. under the title "Entomological Review". The Smithsonian Institution is preparing a translation of the Diptera volumes of the "Keys to the Insects of the European Part of the U.S.S.R.", but publication of this translation will take a few years (1982?). Translations of some keys from the papers of Stackelberg, Violovitsh and Zimina have been made. In the next issue of SYRPHOS I will publishes a list of these and who has them. So if you have any translations of Russian syrphid papers, please let me know about them.

Kumar D. Ghorpade: Has started a new journal called COLEMANIA. This journal will publish promptly (possibly within one year) papers and notes that report new information in all aspects of entomology. Normally, no paper more than twenty-five printed pages in length, including tables, figures and literature references, will be accepted. Only papers in English are accepted. Authors with publication funds are requested to pay a page charge of Rs 50 (Indian) or US $ 15 (foreign) per page and relieve us of financial strain. In order to speed up publication and prevent delays, proofs will not be supplied to authors. A total of fifty (50) gratis reprint copies of each paper will be furnished to the author. Manuscripts must be sent to: The Editor, COLEMANIA, P. O. Box 2564, 123 Brigade Road, Bangalore-560 025, India. The publisher of COLEMANIA will also consider, for its supplementary series of taxonomic monographs (AYYARIA), large revisionary papers dealing with the systematics of particular taxa of insects or other land arthropods. Manuscripts submitted for consideration in AYYARIA must not be less than 30 printed pages. Other requirements for AYYARIA are the same as for COLEMANIA.

J. Oliver Watts: "My own work on Syrphidae is progressing quite well; I am now busy on the identification of my first summer's sampling of different habitats within a large forest complex near Oxford. In particular I am looking at the conifer-deciduous gradient and hoping to use syrphids as an indicator group; samples are being collected using malaise traps and we are also doing malaise trap experiments. I would also be interested to know your opinions on whether there are indeed two palaearctic species of Baccha, about which there seems to be much discussion. I myself am also having a lot of trouble separating Syrphus vittiger and S. lineola -- any comments?

RECENT LITERATURE

Under this heading, all publications on syrphids or of interest to syrphid workers are listed. Workers are requested to send reprints of their papers to the compiler for inclusion. TWO copies, if available, would be appreciated: One copy will be deposited in the combined reprint library of the U. S. Department of Agriculture (Systematic Entomology Laboratory) and Smithsonian Institution (Entomology Department); and the other in that of the compiler.

On a limited basis, we will supply xerox copies of rare and out of print papers on Syrphidae. "Limited" means that we will be glad to supply a few pages to those who can not obtain them from any other sources, but we don't intend to supply copies of just anything to everyone.

Not many reprints have been received since the last SYRPHOS. Only by sending your reprints promptly can this literature section be useful to others. If you don't get reprints of your paper, please send the title and reference.


Afanasjeva, O. C. 1980. (On the functional morphology of the male genitalia in Diptera. I. Tipula czizeki de Jong (Tipulidae) and Eristalis nemorum L. (Syrphidae)). Entomol. Obozr. 59: 262-268.

M. Zaka-ur-Rab (1979) Morph. of the ♂ terminalia of Sphaerophoria indiana Big (D:S) Zool. Jb., Abt. Anat. Ontog. Tiere 101, 397-403

GCD Griffiths (1972) Series ent. 8, 1-340 Junk, The Hague Q03(1)
The phylogenetic class. of Diptera Cyclorrhapha w. sp. ref. to the str. of the ♂ postabdomen.

*Akinlosotu, T. A. 1978. The interrelationship of the cabbage aphid parasite Diaeretiella rapae (Hymenoptera: Aphidiidae) and the entomophagous predators of the aphid. Nigerian J. Entomol. 3: 5-10.

Bagatshanova, A. K. 1980. (New species of Syrphidae (Diptera) from Central Yakutia). Entomol. Obozr. 59: 421-427.

*Barkemeyer, W. 1979. Fauna of Hover Flies of Fintland Moor near Oldenburg, northern West Germany, according to captures in colored bowls (Diptera: Syrphidae). Drosera 79: 49-58.

*Bakhetia, D. R. C. & A. K. Sharma. 1979. Preliminary observations on aphid infestation on Eruca sativa. Indian J. Entomol. 41: 288-289.

Barkalov, A. V. 1978. (New species of Cheilosia Meigen (Diptera, Syrphidae) from the Altai Region). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 12: 182-183.

------. 1979. (New fly species of Cheilosia Meigen, 1822 (Diptera, Syrphidae) from Ust'ya Eniseya). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 13: 87-90.

------. 1980. (New data on the taxonomy of the flower flies (Diptera, Syrphidae). Contribution 5). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 14: 135-136. (In Russian)

-------. 1980. (A new species Cheilosia ussuriana sp. n. (Diptera, Syrphidae) from Southern Primorye. Contribution 4). In (Taxonomy and Ecology of Arthropoda in Siberia), Novosibirsk, pp. 132-134. (In Russian)

Barendregt, A. 1980. The identification of the females in the genus Parhelophilus Girschner, 1897 (Diptera, Syrphidae). Entomol. Ber., Amsterdam 40: 113-114.

Claussen, C. 1980. Die Schwebfliegenfauna des Landesteils Schleswig in Schleswig-Holstein (Diptera, Syrphidae). Fauna. Ökol. Mitt., Suppl. 1: 3-79.

Claussen, C. & E. Torp. 1980. Untersuchungen über vier europäische Arten der Gattung Anasimyia Schiner, 1864 (Insecta, Diptera, Syrphidae). Mitteil. Zoolog. Mus. Univ. Kiel 1(4), 16 pp.

Crossley, R. 1980. Eriozona syrphoides (Fallén)(Dipt., Syrphidae) in Yorkshire. Entomol. mon. Mag. 115: 200 (1979).

*Dicker, G. H. L. 1979? A migration of syrphids (Diptera, Syrphidae) in East Sussex. Entomol. mon. Mag. 113: 212.

*-------. 1979? Volucella zonaria (Diptera, Syrphidae) unusually common in Kent. Entomol. mon. Mag. 113: 192.

Dušek, J., P. Láska & J. Sedivy. 1979. Parasitization of aphidophagous Syrphidae (Diptera) by Ichneumonidae (Hymenoptera) in the Palaearctic region. Acta Entomol. Bohemoslov. 76: 366-378.

Entwistle, P. F. 1980. Criorhina ranunculi (Panz.) (Dipt., Syrphidae) in N. E. Scotland. Entomol. mon. Mag. 115: 256.

Furuta, K. 1976. Studies on the Dynamics of the Low Density Population of Gypsy Moth and Toda-fir Aphid. Bull. Gov. Forest Expt. Sta. 279, 85 pp. (Didea alneti (Fallen) discussed as major predator of Cinara todocola).

Gilbert, F. S. 1980. Flower visiting by hoverflies (Syrphidae). J. Biol. Education 14: 70-74.

* not seen. Citation from Biol. Abstracts.

Gomes, A. 1980. Sírfidos de Portugal existentes nas coleccoes Entomologicas do Centro de Zoologia (Diptera, Syrphidae). Bol. Soc. Port. Entomol. 5: 1-5.

van der Goot, V. S. 1980. Amsterdam (Diptera, Syrphidae). Entomol. Ber., Amsterdam 40: 96.

*Heal, J. 1979. Color patterns of Syrphidae. 2. Eristalis intricarius. Heredity 43: 229-238.

Hippa, H. 1980. The genera Orthoprosopa Macquart and Paratropidia Hull (Diptera: Syrphidae), with a description of P. pacifica n. sp. Entomol. Scand. 11: 231-235.

*Jeremies, M. 1978. Short sketch of the story of Dipterological investigation in the oberlausitz, Germany. Entomol. Nachr., Dresden 22: 125-126.

*Khali, F. M., K. T. Awadallah & T. T. Mahmoud. 1978. Seasonal abundance of natural enemies associated with alfalfa plants in Hammam Al-Alil, Iraq. Mesopotamia J. Agric. 13: 213-220. (Syrphus corollae & Sphaerophoria scripta discussed).

Láska, P. & P. Starý. 1980. Prey records of aphidophagous syrphid flies from Czechoslovakia (Diptera, Syrphidae). Acta Entomol. Bohemoslov. 77: 228-235.

*Malinowksa, D. 1979. Communities of aphidophagous syrphids (Diptera, Syrphidae) in the Lublin, Poland region. Memorabilia Zool. 30: 37-62.

*McLean, I. F. G. 1979. Notes on Diptera taken in 1976. Entomol. Rec. J. Var. 91: 71.

Nielsen, T. R. 1980. Melangyna lucifera n. sp. from southern Norway (Diptera: Syrphidae). Entomol. Scand. 11: 310-312.

------. Cheilosia angustigena Becker, 1894 (Dipt., Syrphidae) found in Norway. Fauna norv. (B) 27: 79.

Owen, J. 1979. Hoverflies (Diptera: Syrphidae) of Leicestershire: An annoted checklist. Trans. Leichester Liter. Philosop. Soc. 73: 13-31.

*Parrish, J. A. D. & F. A. Bazzaz. 1979. Difference in pollination niche relationships in early and late succesional plant communities. Ecology 60: 597-610.

Peck, S. B. & J. Peck. 1980. Insect field work opportunities in Barbados, Lesser Antilles. Entomol. News 91: 63-64.

Peck, S. B. & J. Kukalova-Peck. 1980. A guide to some Natural History field localities in Ecuador. Stud. Neotrop. Faun. Environ. 15: 35-55.

*Peck, L.V. 1979. (New species of Eumerus Mg. (Diptera, Syrphidae) from Central Asia). Trudy Vses. Entomol. Obschuh. 61: 191-xxx.

*Saunders, W. 1979. Oviposition of the hover fly, Syrphus corollae, as a factor depending on the size of the aphid colony. Z. Angew. Zool. 66: 217-232.

Skufyin, K. V. 1979. (Variability of colour patterns of Sphaerophoria scripta L. (Diptera, Syrphidae) as a measure of variability of certain diagnostic characters.) In (Ecological and Morphological Principles of Diptera Systematics (Insecta), Acad. Sci., USSR, Zool. Inst., pp. 89-91.

Speight, M. C. D. 1980. The Chrysogaster species (Dipt. Syrphidae) known in Great Britain and Ireland. Entomol. Rec. J. Var. 92: 145-150.

Stubbs, A. E. 1980. The rearing of Cheilosia paganus and C. fraterna (Diptera: Syrphidae). Entomol. Rec. J. Var. 92: 114-117.

Thompson, F. C. 1980. Notes on Palaearctic Syrphidae (Diptera). Proc. Entomol. Soc. Washington 82: 400.
-------. 1980. Proper placement of some Palaearctic "Cheilosia" species (Diptera: Syrphidae). Proc. Entomol. Soc. Washington 82: 411.
-------. 1980. Proper placement of some Palaearctic "Syrphus" species (Diptera: Syrphidae). Proc. Entomol. Soc. Washington 82: 513.
-------. 1980. The problem of old names as illustrated by Brachyopa "conica Panzer", with a synopsis of Palaearctic Brachyopa Meigen (Diptera: Syrphidae). Entomol. scand. 11: 209-216.
Torp Pedersen, E. 1964. Syrphidefaunaen i Aulum sogn i Vestjylland. Flora Fauna 70: 101-128.
-------. 1968. De danske arter af slaegten Sphegina Mg. (Diptera, Syrphidae). Entomol. Meddel. 36: 127-135.
-------. 1969. Studier over syrphidefaunaen pa Laeso. Flora Fauna 75: 149-169.
-------. 1971. De danske arter slaegten Neoascia Williston (Diptera, Syrphidae). Entomol. Meddel. 39: 51-62.
-------. 1971. Some Syrphidae from Spain, with descriptions of two new species (Insecta, Diptera). Steenstrupia 1: 229-245.
-------. De dansk arter af slaegten Paragus Latreille (Diptera, Syrphidae). Flora Fauna 78: 1-6.
-------. 1973. Fortegnelse over Danmarks svirrefluer (Diptera, Syrphidae) og deres faunistik. List of the syrphids of Denmark and their faunistics. Entomol. Meddel. 41: 21-48.
-------. 1975. Nye faunistiske bidrag til fortegnelsen over Danmarks svirrefluer (Diptera, Syrphidae). New faunistic contributions to the list of the syrphids of Denmark. Entomol. Meddel. 43: 177-185.
-------. 1976. A catalog of the collection of Syrphidae (Diptera) in Jelling, Denmark. 24 pp., Jelling
-------. 1978. Graerup Langso - en perle i den vestjyske naturpark. 48 pp.
-------. 1979. Nye faunistiske bidrga til fortegnelsen over Danmarks svirrefluer (Diptera: Syrphidae) 2. New faunistic contributions to the syrphids of Denmark 2. Entomol. Meddel. 47: 75-85.
-------. 1980. Stovbaek Krat ved Storaen. 48 pp.
-------- & Nielsen, T. R. 1973. Syrphidae (Diptera) from Sicily, with a description of a new Pipizella species. Norweg. J. Entomol. 20: 295-299.
Veltman, A. 1979. Hover flies of the Amsterdamse Bos (Diptera: Syrphidae). Entomol. Ber., Amsterdam 39: 136-140.
Vockeroth, J. R. 1980. A review of the Nearctic species of Melangyna (Meligramma) Frey (Diptera: Syrphidae). Canad. Entomol. 112: 775-778.
Violovitsh, N. A. 1932. (On the fauna of Syrphidae of former Moscow province). Zapiski Bolshevsk. biol. sta. 5/6: 91-93.
------. 1935. (On Diptera fauna of Moscow region). Zapiski Bolshevsk. biol. sta. 7/8: 161-172.
------. 1952. (Two new species of Syrphidae from South Sakhalin (Syrphidae, Diptera). Soobtst. Dalnevost. fil. im. Komarova Akad. nauk SSSR 4: 56-57.
------. 1953. (Description of new species of genus Chrysotoxum Mg. (Diptera, Syrphidae) from Middle Asia). Entomol. Obozr. 33: 358-359.

------. 1955. (New and little known hover flies (Diptera, Syrphidae) from Sakhalin Region). Entomol. Obozr. 35: 462-472.
------. 1956. (New species of hover flies (Diptera, Syrphidae) from Sakhalin region). Entomol. Obozr. 35: 462-472.
------. 1956. (New species of genus Syrphus Fabr. (Diptera, Syrphidae) from the Far East). Zool. Zhur. 35: 741-745.
------. 1957. (New palaearctic species of Syrphidae (Diptera) from the Far East). Entomol. Obozr. 36: 748-755.
------. 1960. (Materials on fauna of hover flies (Diptera, Syrphidae) from Sakhalin and the Kuril Islands). Horae Soc. Entomol. Union Sov. 47: 217-272.
------. 1960. (New palaearctic species of hover flies (Diptera, Syrphidae) from the Far East). Entomol. Obozr. 39: 205-209.
------. 1964. (New palaearctic species of hover flies from genus Chrysotoxum Mg. (Diptera, Syrphidae) of Tuva). Entomol. Obozr. 43: 458-460.
------. 1965. (New palaearctic species of genus Syrphus Fabr. (Diptera, Syrphidae) from Tuva). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 1: 7-13.
------. 1966. (New species of the fly family Syrphidae (Diptera) from Tuva). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 2: 49-53.
------. 1966. (New palaearctic species of genus Cheilosia Meig. (Diptera, Syrphidae) from the Altai). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 2: 54-55.
------. 1966. (On the fauna of Syrphidae (Diptera) from Tuva). Pp. 165-173. In (Fauna and ecology of Arthropoda of Siberia) Novosibirsk
------. 1971. (New species of the genus Microdon Meig (Diptera, Syrphidae) from the Altai). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 4: 62-63.
------. 1971. (New species of the genus Chrysotoxum Mg. (Diptera, Syrphidae) from Tuva). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 5: 112-114.
------. 1971. (New species of the genus Cheilosia Mgn. (Diptera, Syrphidae) from Moneron Island, Sakhalin Region). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 5: 109-111.
------. 1973. (New palaearctic species of the genus Helophilus Mgn. (Diptera, Syrphidae) from the Altai). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 6: 96-98.
------. 1973. (New palaearctic species of the genus Chrysotoxum Mgn. (Diptera, Syrphidae)). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 6: 99-102.
------. 1973. (New palaearctic species of the genus Chrysotoxum Mgn. (Diptera, Syrphidae)). Entomol. Obozr. 52: 925-936.
------. 1973. (New palaearctic species of hover flies (Diptera, Syrphidae) from the Altai). In (Fauna of Siberia), part 2. Trudi Biol Inst. Akad. nauk SSSR (Sibirsk. Otdel.) 16: 145-149.
------. 1973. (New palaearctic species of the genus Criorrhina Mg. (Diptera, Syrphidae)). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 7: 112-116.

------. 1974. (Revision of the palaearctic species of the genus Chrysotoxum Mg. (Diptera, Syrphidae)). Entomol. Obozr. 53: 196-217.
------. 1974. (Short survey of the species of the genus Criorrhina Mg. (Diptera, Syrphidae) of the palaearctic fauna). Pp. 124-128. In (Fauna and Ecology of the insects of Siberia) Novosibirsk.
------. 1974. (Short survey of palaearctic species of the genus Ceriana Raf. (Diptera, Syrphidae)). Izv. Sib. Otdel. Akad. nauk SSSR 5: 81-88.
------. 1975. (Short survey of the palaearctic species of the genus Xanthogramma Schiner (Diptera, Syrphidae)). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 9: 90-106.
------. 1975. (New species of hover fly (Diptera, Syrphidae) fauna of USSR). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 9: 73-89.
------. 1975. (Short survey of palaearctic species of the genus Scaeva Fabr. (Diptera, Syrphidae)). Entomol. Obozr. 54: 176-179.
------. 1976. (Short survey of the species of the genus Microdon Meigen (Diptera, Syrphidae) fauna of USSR. In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 10: 162-167.
------. 1976. (New palaearctic species of hover flies (Diptera, Syrphidae)). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 10: 130-154.
------. 1976. (Survey of species of the genus Baccha Fabricius, 1805 (Diptera, Syrphidae) of palaearctic fauna). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 10: 155-161.
------. 1976. (Material to syrphid fauna (Diptera, Syrphidae) of Siberia). In Zolotarenko, G. S., ed. (Fauna Genmintov i tslenistonogich Siberia), Trudi Biol. Inst., Akad. nauk SSSR (Sibirsk Otdel.) 18: 326-346.
------. 1977. (New species of hover flies (Diptera, Syrphidae) of Palaearctic fauna). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk //: 68-84.
------. 1977. (Two new species of the genus Helophilus Mg.(Diptera, Syrphidae) In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk //: 85-88.
------. 1978. (New species of hover flies (Diptera, Syrphidae) of the palaearctic fauna). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk /2: 172-181.
------. 1978. (Revision of the genus Mallota Meigen, 1822 (Diptera, Syrphidae)). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk /2: 163-171.
-------. 1978. (A new Palaearctic species of the genus Chrysosyrphus Sedman, 1965 (Diptera, Syrphidae). 34th Contribution). Izv. Sib. Otdel. Akad. nauk SSSR (Biol. nauk) 5: 111-114.
------. 1979. (Survey of palaearctic species of the genus Helophilus Meigen, 1822 (Diptera, Syrphidae)). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk /3: 64-90.
------. 1979. (Survey of the siberian species of the genus Orthoneura Macquart, 1829 (Diptera, Syrphidae)). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk /3: 48-63.

-------. 1979. (New genus and species of Narcissus fly (Diptera, Syrphidae) of Palaearctic Fauna). Trudy Vses. Entomol. Obschuh. 61: 190-191.
-------. 1980. (Survey Palaearctic on species of genus Lejota Rondani, 1857 (Dipt., Syrphidae). Izv. Sib. Otdel. Akad. nauk SSSR (Biol. nauk) 7: 44-47.
-------. 1980. (Survey Palaearctic on species of genus Triglyphus Loew, 1840 (Diptera, Syrphidae). Izv. Sib. Otdel. Akad. nauk SSSR (Biol. nauk) 7: 40-44.
-------. 1980. (New Palaearctic species of the genus Psilota Meigen, 1822 (Dipt., Syrphidae) from the Siberian Fauna. 36th Contribution.) Izv. Sib. Otdel. Akad. nauk SSSR (Biol. nauk) 7: 47-51.
------. 1980. (A new species and genus of hover fly (Diptera, Syrphidae) fauna of Palaearctic). In (New species of Insects), Trudy vses. Entomol. Obschuh. 61: 190-192.
-------. 1980. (New species of the flower flies (Diptera, Syrphidae) of the Palaearctic Fauna. Contribution 35). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 14: 124-130.
-------. 1980. (Review of Siberian species of the genus Sphegina Mg., 1822 (Diptera, Syrphidae). In Cherepanov, A. I. (ed.), (New and little known species of Siberian Fauna), Novosibirsk 14: 105-123.
-------. 1980. (Addendum to the list of Narcissus flies (Diptera, Syrphidae) of the Siberian Fauna.) Pp. 266-269. In G. S. Zolotarenko (ed.), (Fauna and Ecology of phytophagous and predaceous insect of Siberia). Novosibirsk
Violovitsh, N. A. & A. V. Barkalov. 1980. (Towards the Fauna of Narcissus Flies (Diptera, Syrphidae) of the lower reaches of Enisei River.). Pp. 270-273. In G. S. Zolotarenko (ed.), (Fauna and Ecology of phytophagous and predaceous insect of Siberia). Novosibirsk
Webb, D. W. 1980. Primary Insect Types in the Illinois Natural History Survey Collection, Exclusive of the Collembola and Thysanoptera. Illinois Nat. Hist. Surv. Bull. 32: 53-190. (Syrphids, p. 91)
*Zimina, L. V. 1979. (Syrphidae fauna of Yakutsk-ASSR, USSR). Byull. Mosk. O-va. Ispyt. Otd. Biol. 84: 46-49.

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→ Interested in the Ecology, Biogeography and Morphology of Palaearctic SYRPHIDAE. Current project is mapping the distribution of Syrphidae in Essex through our biological records Centre.

Philip F. Entwistle. Interests - Biology, Ecology and Zoogeography of Syrphidae. Though I began collecting in July 1951, I went through an unproductive period from 1954 to 1965 due partly to working in West Africa. I now work in the U.K. on the epizootiology of insect virus diseases and their use in pest control. During the past six years I have been conducting a spare time study on the syrphids associated with planted coniferous forests in Great Britain. Most of my work has been done in Wales but I have also been able to collect some data in the north of Scotland. The 74 species (about 30 per cent of the U.K. fauna) so far recorded for an essentially Sitka spruce (Picea sitchensis) forest lying at an altitude of 1000-2000' above sea level in central Wales seems surprisingly good and provides plenty of food for thought on the reasons why such a large fauna has developed in forest strongly dominated by coniferous species alien to Great Britian. Apart from interesting questions on colonisation, I am trying to investigate the biology and ecology of some of those species which have a particularly marked association with such woodland and at the moment Eriozona syrphoides and Metasyrphus (Lapposyrphus) lapponicus are under scrutiny. There are taxonomic problems associated with the latter species and I would be very pleased to see any specimens fellow workers may feel generous enough to lend. Finally, at the moment I am acting as collator of records for the British Hoverfly Recording Scheme which is part of the Distribution Maps Scheme run by the Nature Conservancy Council.

Entwistle, P. F. 1978. Twenty years of Eriozona syrphoides (Fallen) (Dipt., Syrphidae) in Britain. Entomol. mon. Mag. 113: 146.

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(Sorry to be late with your SYRPHOS. With the New Year and your continued support (profiles, collection write-ups, reprints, etc.), I will try to be more prompt. FCT 15 Jan 81)