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H. E. Jaques
Iowa Wesleyan College

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By H. E. JAQUES

The family Tachinidae * is one of the most important families of flies. Well over 1500 species are known for our continent and more than 5000 species have been named for the entire world. Their chief value to man lies in their parasitic habits. Many of the species are highly destructive to injurious insects, especially the caterpillars of the Lepidoptera. Their usual procedure is to search out a prospective host and attach one or more eggs to the surface, often in some place which the victim cannot reach with its jaws. The maggot upon hatching immediately enters its host and lives in the open blood sinuses where the nutriment is rich but no vital parts of the host are injured. The maggots may leave their host when they have completed their growth and pupate in the ground or other protected place, but in the case of many species remain within the host to pupate and later emerge as an adult. The host caterpillar frequently pupates before the maggot has completed its growth. That makes but little difference to the tachinid larva which then feeds upon the contents of the pupa and in turn pupates within it. Presently, then, instead of a moth or butterfly emerging from the pupal case one or more tachinid flies appear.

There is considerable diversity in the life histories of the many members of this family. Some tachinids hurry matters by depositing living larvae instead of eggs usually inserting them through the skin of the host. Some species produce as few as 50 eggs while other tachinids may produce 5000 eggs or larvae.

The adults of some species measure only two or three millimeters in length, but most of the species are fairly bulky, medium to large size flies, some attaining a length of nearly 20mm. The abdomen, especially the apical end, is usually covered with heavy bristles. One soon comes to recognize or suspect members of the family by the presence of such bristles.

The many students and others who through the years have collected the specimens now in the Iowa Insect Survey collection have taken tachinids in only an incidental way along with their other catches. None has specialized in the group. The list which follows gives the names of 82 known Iowa species. This number

* This family is now, possibly more correctly, known as the Larvaevoridae.

could doubtless be greatly enlarged by specialized collecting and study. It is hoped that some one may give this group the further attention it merits.

The number preceding the name in each case is a catalog number used for arranging and locating the specimens in the collection. Determinations have been made or checked by various specialists.

256-61 Cistogaster immaculata Macq.
256-71 Gymnoclytia occidua (Walk.)
257-2 Rhodogyne fuliginosa (Desv.) (Gymnosoma)
257-3 Rhodogyne occidentalis Cur. (Gymnosoma)
258-12 Trichopoda pennipes Fab.
258-31 Myiophasis metallica Towns.
260-42 Celatoria diabroticae Shim.
260-71 Xenadmontia degeerioides Coq.
260-81 Admontia pergandei Coq.
261-22 Lixophaga plumbea Ald.
261-52 Oedematocera gilvipes Coq.
261-63 Pseudomyothyria ancilla Walk.
262-61 Leskiomima tenera Wied.
263-11 Phrynofrontina discalis Coq.
263-66 Cryptomeigenia theutis Walk.
264-21 Crocuta geniculata DeG. (Siphona)
264-61 Blepharigena cinerea Coq.
264-81 Voria ruralis Fall.
265-41 Belvosia bifasciata Fab.
265-71 Aphria ocypterata Towns.
266-3 Cylindromyia dosiades Walk.
266-5 Cylindromyia binotata Bigot
266-6 Cylindromyia nana Towns.
266-41 Bonnetia comta Fall.
266-51 Pyraustomyia penitalis Coq.
266-61 Mericia ampelus Walk. (Ernestia)
266-71 Amedoria luctuosa Mg.
267-22 Gymnocheta ruficornis Will.
267-31 Lydina areos Walk.
267-53 Nemorilla floralis Fall.
267-71 Carcelia amplexa Coq. (Zenillia)
268-1 Aplomya caesar Ald. (Zenillia)
268-5 Aplomya confinis Fall. (Zenillia)
268-8 Zenillia futilis O. S.
268-61 Eucelatoria armigera Coq.
268-73 Phorocera pachypyga Ald. & Web.
268-74 Phorocera tortricis Coq.
268-75 Phorocera erecta Coq.
269-1 Phorocera claripennis Macq.
269-83 Doryphorophaga doryphorae Rly.
269-84 Doryphorophaga macella Rein.
270-61 Minthozelia montana Towns.
271-52 Leschensultia leucophrys Wied.
271-72 Winthemia quadripustulata Fab.
271-73 Winthemia rufopicta Bigot
271-74 Winthemia sinuata Rein.
271-75 Winthemia datanae Towns.
272-1 Paradidyma singularis Towns.
272-2 Paradidyma setigera Coq.
272-3 Paradidyma affinis Rein.
272-26 Ceracia dentata Coq.
272-46 Leucostoma atra Towns.
272-72 Tachinomyia panaetius Walk.
272-73 Tachinomyia variata Cur.
272-91 Achaetoneura frenchii Will.
272-92 Achaetoneura Archippivora Will.
273-11 Oxynops anthracina Bigot
273-45 Salmacia frontosa Say (Gonia)
273-48 Salmacia sequax Will. (Gonia)
273-50 Salmacia senilis Will. (Gonia)
273-71 Acroglossa hesperidarum Will.
273-73 Spallanzania bucephala Mg.
273-81 Eugaediopsis ocellaris Coq.
274-1 Chaetogaedia analis Wulp.
274-2 Chaetogaedia monticola Bigot
274-3 Chaetogaedia crebra Wulp.
274-51 Peleteria anaxias Walk.

274-53 Peleteria iterans Walk.
274-55 Peleteria apicalis Walk.
274-72 Archytas aterrima Desv.
274-74 Archytas lateralis Macq.
274-75 Archytas apicifera Walk.
274-76 Archytas metallica Desv.
275-71 Microphthalma disjuncta Wied.
275-72 Microphthalma michiganensis Towns.
276-71 Zelia vertebrata Say
276-91 Copecrypta nitens Wied.
277-21 Paradexodes aurifrons Towns.
277-31 Euclytia flava Towns.
278-1 Thelaira americana Brooks
278-62 Spathidexia dunningi Coq.
278-82 Dinera cinera Towns.

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