

***Drosophila ovivororum* sp. n., a new species of the *Drosophila virilis* group (Diptera, Drosophilidae).**

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Since 1970 the authors have cultured a laboratory stock of a drosophilid fly which is very closely related to *Drosophila* (s.str.) *lummei* Hackman. It was mentioned in the description of *D. lummei* (HACKMAN 1972) that a stock descended from a single female specimen from Karesuando in Swedish Lapland possibly belonged to another species, which we were not able to separate

tillmäter säkerligen med rätta byggnaden av hanens postabdomen stor taxonomisk betydelse. Antalet oplacerade familjer är få: Canacidae, Fergusonidae, Notomyzidae och Braulidae. Det undersökta materialet har i en del grupper varit rätt knappt men trots allt synes det som om arbetet fört diptersystematiken ett stort steg framåt. Det väsentliga är att nya synpunkter på de olika flugfamiljernas släktskap har fåtts fram och på denna punkt kommer helt visst även sådana dipterologer, som ställer sig kritiska gentemot kladismen, att ge honom sitt erkännande. Arbetet är redigt och klart uppställt och i slutet av boken finner man hela systemet för Brachycera. Boken är ju närmast avsedd för diptersystematiker men på grund av det mera allmänt betonade inledningsavsnittet kan den vara en intressant läsning för både anhängare och motståndare till Hennigs principer för ett fylogenetiskt system och avgränsning av taxa.

Walter Hackman

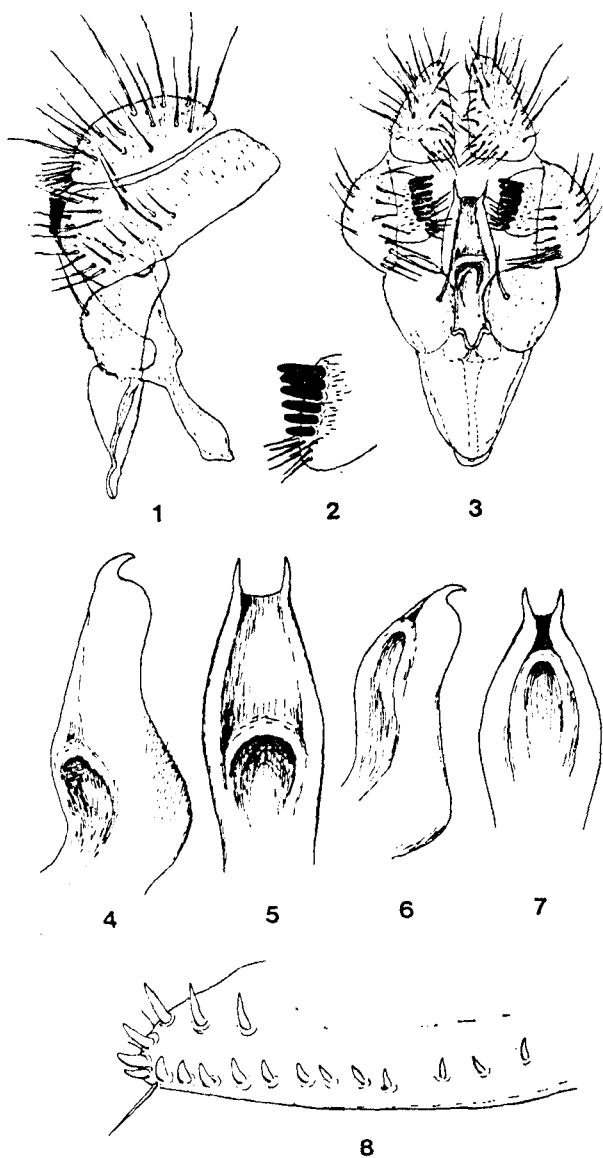
morphologically from *D. lummei*. In 1972 the authors and their co-workers made special efforts to clarify the status of this stock by extensive collecting and re-examination of materials from 1970. It proved to belong to a distinct new species, which was found in several other localities besides Karesuando, in Finland and Sweden. The species can be distinguished from *D. lummei* by the characters of the male genitalia and (at least in fresh specimens) the oral bristles.

The name of the new species, *ovivororum* (of the sheep eaters), was taken from the title of a novel by the Finnish writer Veikko Huovinen. There was a coincidental double connection between the novel and our collecting trip to Lapland in 1970, during which the new species was found.

D. ovivororum sp.n. is apparently fairly common in Finland, occurring sympatrically with three other species of the *virilis* group (*D. littoralis* Meigen, *D. lummei* Hackman and a species possibly identical with *D. ezoana* Takada & Okada).

The description of *Drosophila* (s.str.) *ovivororum* sp.n. is as follows:

♂ — Body length about 3.2 mm and wing length 3.5 mm. Head colouring and chaetotaxy, with the exception of the oral bristles, as in *lummei*. Third joint of antennae dark grey, as in *lummei*. Arista with three or four dorsal and two or three ventral branches in addition to the end fork; seven or eight



FIGS. 1—5. *Drosophila ovivororum* sp.n. male genitalia, Fig. 1 profile, Fig. 2 surstylus, Fig. 3 ventral view, Fig. 4 penis in profile and Fig. 5 penis in ventral aspect. FIGS. 6—7. *D. lummei* Hackman, penis in profile and in ventral aspect. FIG. 8. *D. ovivororum*. ovipositor guide.

additional very small branches occur. Width of jowls about $1/3$ of the vertical diameter of the eye, thus broader than in *lummei*. Facial carina not different from that of *lummei*. Vibrissa strong, more than twice as long as the second oral bristle. The latter slightly

stronger and more protruding than the following oral bristles. In *lummei* the second and the following oral bristles are almost equally strong. Mesonotum with the same colour and stripe pattern as in *littoralis* and *lummei*. Acrostichal hairs in six rows. Bristles of mesonotum and scutellum as in *lummei*. Colour and chaetotaxy of the pleura as in *lummei*. Posterior cross-vein of the wing shaded to the same extent as in *littoralis* and *lummei*. Costal index of the wing 2.9—3.5. The stronger costal fringe extending about $2/5$ to $2/3$ of the distance between 2nd and 3rd vein. Legs as in *lummei*. Abdomen dark grey or black. Male genitalia as in Figs. 1—5. Surstyli with combs of 5—8 dark teeth (in *lummei* 5—6). The comb of teeth is inserted at a slightly different angle, more obliquely, than in *lummei*. The best character diagnostic of the species is the shape of the penis (Figs. 4—5). In *ovivororum* the straight medioventral part before the end hooks of the penis is much longer than in *lummei*. (Figs. 6—7).

♀ — Body length about 3.4 mm. and wing length 3.5 mm. Extremely similar to the female of *lummei*. The females of these two species can be separated from those of *littoralis* by the dark third joint of the antennae (in *littoralis* partly more brownish). In dried pinned specimens this difference is less distinct. Vibrissa and other oral bristles as in the male and can, at least in fresh specimens, be used for separating *ovivororum* from *lummei*. Costal index of wing 2.8—3.7. Legs as in *lummei*. Ovipositor (Fig. 8) of same type as in *littoralis* and *lummei*. We have not been able to find constant characters in the marginal denatation of the ovipositor for separating any of the four species of the *virilis* group occurring in Finland and Sweden.

Holotype, ♂, Sweden, Karesuando in Swedish Lapland, from a laboratory stock started by the authors in 1970. The holotype, a pinned

specimen (type no. 14265), is preserved in the collection of the Zoological Museum, Helsinki. Paratypes ♂♂ and ♀♀ from the same stock as the holotype and from stocks from the following Finnish localities: Kuopio (started 1972, J. Immonen), Kiuruvesi (started 1972, A. Nederström), Oulanka (started 1972, J. Lumme & W. Hackman).

Numerous samples of this species have been identified by morphological traits and also by enzyme electrophoresis. A detailed account, including biochemical and cytological characters of the four European species of the *virilis* group will be published later. The localities so far for *D. ovivororum* are as follows (The grid system used is the same as in HACKMAN 1972):

Finland: *Ab*: Tenhola (grid 666:27), 1 ♂ 1972 (J. Lokki); *N*: Esbo (668:36), 3 ♀♀ 1972 (W. Hackman); *Ta*: Tyrväntö (678:35), 7 ♂♂ 3 ♀♀ 1972 (J. Lokki), Lammi (677:39), 2 ♂♂ 1972 (J. Lumme & P. Lankinen), Maakeski (679:41) 1 ♂ 1 ♀ (P. Lankinen); *Sa*: Punkaharju (685:62) 3 ♂♂ 1972 (J. Lumme), Rantasalmi (688:56), 1 ♂ 1970 (A. Nederström); *Tb*: Jyväskylä (690:43), 1 ♂ 1972 (J. Lumme); *Sb*: Kuopio, Vaajasalo (697:53) 4 ♂♂ 10 ♀♀ 1970, 27 ♂♂ 28 ♀♀ 1972 (S. Lakovaara & J. Immonen), Kiuruvesi (705:46), 31 ♂♂ 16 ♀♀ 1972 (A. Nederström); *Kb*: Ilomantsi (697:68) 4 ♂♂ 3 ♀♀ 1972 (P. Lankinen); *Ok*: Kajaani (712:53) 1 ♀ 1970 (S. Lakovaara), Paltamo (714:53), 5 ♂♂ 1972 (A. Oikarinen); *Ob*: Oulu, Hupisaaret (721:42), 1 ♀ 1972 (A. Oikarinen & K. Kavalto), Oulu, Sanginsuu (720:43), 1 ♂ 1972 (R. Alatalo), Kemi (729:38), 23 ♂♂ 21 ♀♀ 1972 (J. Lumme & A. Oikarinen), Kemijärvi (740:54), 1 ♂ 1 ♀ 1972 (R. Alatalo); *Ks*: Oulanka (736:60) 51 ♂♂ 18 ♀♀

1972 (W. Hackman, J. Lumme, S. Lakovaara); *Lkem*: Pyhäjärvi (744:50) 7 ♂♂ 1972 (A. Saura), Hinkula (751:48) 1 ♂ 1970 (W. Hackman, S. Lakovaara & J. Immonen), 3 ♂♂ 1972 (S. Lakovaara & J. Lumme), Vuotso (750:50) 1 ♂ 1 ♀ 1972 (A. Saura); *Le*: Kilpisjärvi (767:25), 7 ♂♂ 1972 (J. Lumme); *Li*: Utsjoki (777:52) 1 ♂ 1972 (O. Taivainen). — Sweden: Strängnäs 1 ♂ 2 ♀♀ 1972 (P. Lankinen); Karesuando (type locality), 1 ♀ 1970 (S. Lakovaara, W. Hackman & J. Immonen). Most of the specimens mentioned have been checked by enzyme electrophoresis and thus not preserved.

D. ovivororum has been collected in the same kind of biotopes as the other three North European species of the *virilis* group, and in several cases it has been taken in the same samples as the other species, on lake and river shores. Laboratory experiments indicate that the North European populations of *ovivororum*, *lummei*, *littoralis* and the fourth species (*ezoana*?) are reproductively isolated. Among the American species of the *virilis* group, *D. montana* Stone & Patterson is morphologically very close to *ovivororum*.

Reference

- HACKMAN, W. 1972: *Drosophila lummei* sp. n., a new species close to *D. littoralis* Meigen (Diptera, Drosophilidae). — *Notulae Entomol.* 52:89—92.

Atomaria mongolica Johnson i Finland (Coleoptera, Cryptophagidae)

Arten är beskriven av Colin Johnson, som arbetar vid Manchester Museum i England. Han har funnit den bland material, som dr Kaszab insamlat i Mongoliet ca 300 km söderom Irkutsk. Kaszab fann arten i sina fem markfällor med ethylenglycol på 1600 meters höjd den 11. 6. 1966 och den 27. 7. 1966, sammanlagt i 35 exemplar.

Atomaria mongolica står nära *A. berolinensis* Kraatz, men förutom genom sin mörkare färg skiljer den sig från *berolinensis* genom att antennerna, med

undantag av antennklubborna, är litet kortare och tjockare. Halsskölden hos *mongolica* är mera tvär och mera avsmalnande mot basen, varigenom hela skalbaggen gör ett slankare intryck, särskilt kommer detta fram hos hanen. Även genitalierna är olika.

I Finland har *A. mongolica* tagits av Dag Hemdal i *Sb*: Vehmersalmi den 18. 6. 1946 vid kvällsfångst med slaghåv. Enligt brev av Johnson är den dessutom tagen i *Lk*: Kirjavalaks nära Sordavala.

Sten Stockmann