

A new species of *Dactylonotus* Parent (Diptera: Dolichopodidae) from South Africa

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Grichanov, I.Ya. 1998. A new species of *Dactylonotus* Parent (Diptera: Dolichopodidae) from South Africa. *Int. J. Dipterol. Res.*, 9(1): 27—29.

Dactylonotus meuffelsi sp. n. from South Africa is described. *Syntormon formosus* Parent from New Zealand is transferred to *Dactylonotus*. A catalogue and key to 5 known species of the genus are given.

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Key words. Diptera, Dolichopodidae, *Dactylonotus*, South Africa, new species, new combination, key.

Introduction

Basing on antennal morphology, O. Parent (1934) described *Dactylonotus* within the subfamily Rhaphiinae, relating the genus to *Syntormon* Loew. The latter genus is included now in the subfamily Sympycninae. C. E. Dyte (Dyte and Smith, 1980) left the genus within Rhaphiinae. However, legs, setation and hypopygial structures demonstrate strong relationship of *Dactylonotus* with *Argyra*. Moreover, Palearctic *Argyra elongata* (Zetterstedt) also have pedicel with short dorsal projection (Parent, 1938). Some links can be traced between *Dactylonotus* and *Somillus* Brethes from South America. The latter genus is included now in Diaphorinae. So, *Dactylonotus* should be referred to the tribe Argyrini of the subfamily Diaphorinae. Description of *Syntormon formosus* (Parent, 1933) does not differ from generic diagnosis of *Dactylonotus*, although investigation of this species for more precise definition of his status is necessary. Four Afrotropical species of the genus are confined to South Africa.

Holotype and paratypes of the new species are deposited in the Natural History Museum in London.

List of known species of *Dactylonotus*

formosus Parent, 1933: 367 (*Syntormon*), n. comb. — New Zealand.

frater Parent, 1939: 279 — Southern Africa ["Rhodesia"].

grandicornis Parent, 1934: 137 — South Africa

meuffelsi sp. n. — South Africa.

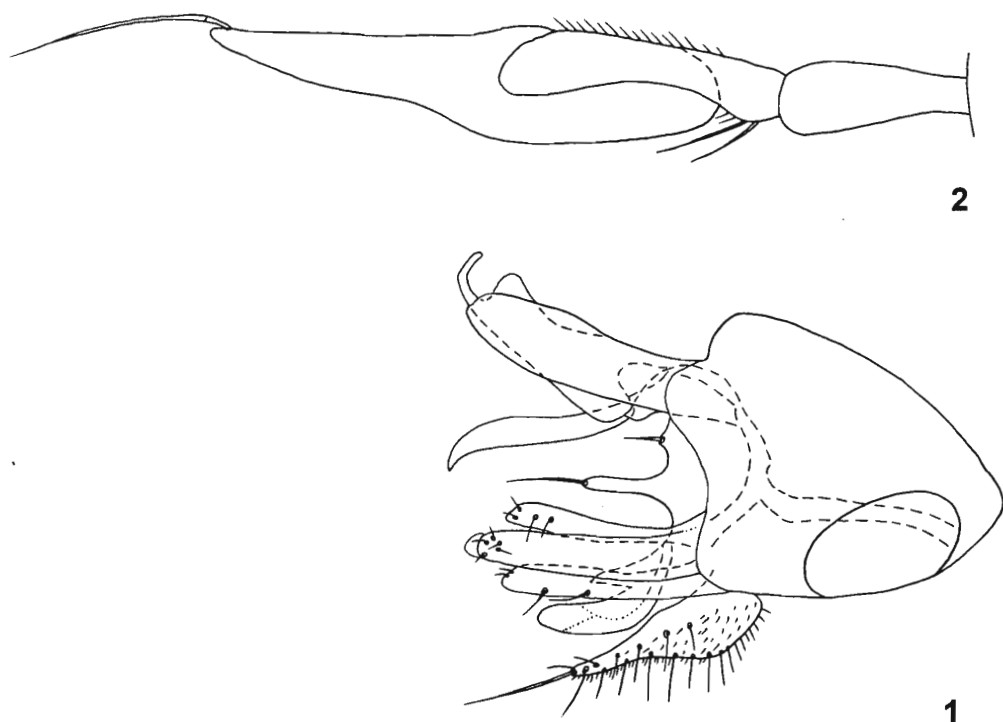
rudebecki Vanschuytbroeck, 1960: 321 — South Africa.

Dactylonotus meuffelsi sp. n. \Rightarrow *rudebecki* V.
(Figs 1, 2)

Holotype. Male, S. Africa (S6), C.P. Silvermine, N.R. Cape penin, 2—3.I.1972 / Southern African Exp. B.M. 1972—1.

Paratypes. 2 females, the same label.

Description. Male. Frons small, grey-brownish pollinose, with medial trapezoid depression, slightly prominent around base of antennae. Face densely whitish pollinose, weakly narrowed in upper part, with parallel sides in lower part, thrice as high as wide at clypeus. Occiput flat, black, grey pollinose. One pair of long ocellar and short postvertical se-

Figs 1—2. *Dactylonotus meuffelsi* sp. n.

1, hypopygium, lateral view; 2, antennae, midlateral view.

tae; no vertical setae. Postocular setae black in upper part and white in lower part of head. Eyes with short white hairs. Antennae inserted in upper fourth of head, dirty-yellow, brownish dorsally and apically, twice longer than height of head; scape long, bare; pedicel with long, slightly widened at apex, dorso-lateral (interior view) process, covered by dorsal, lateral and ventral setulae; 1st flagellomere very long, widest at apex of pedicel, with acute apex, 4.5 times as long as high in middle, entirely covered by microscopic hairs; arista subapical with microscopic hairs, inserted in distal 1/9 of dorsal side of 1st flagellomere. Length ratio of scape to pedicel to first flagellomere (dorsal to ventral sides) to arista, 25 : 35 : 45 : 63 : 30. Palpus and proboscis short, yellow, with sparse black hairs.

Thorax mostly yellow; mesonotum with narrow median metallic blue-green stripe slightly widened posteriorly; scutellum dorsally blue-violet with yellow margin; pleura with two small black spots below calypters; thoracic pollination indistinct. Propodeum with several light hairs in upper part and 2 strong black-brown setae in lower part. Mesonotum with 1 *h*, 1 *ph*, 2 *utpl*, 2 *ia*, 2 *sa*, 1 *pa*. Six pairs of dorsocentral setae somewhat decreasing in size anteriorly, with several scattered hairs in front of the 1st pair; acrostichals biseriate, increasing in length

posteriorly. Scutellum with two long strong and two short fine lateral setae, half as long as medians, dorsally bare.

Legs including coxae yellow, apical segments of all tarsi brownish. Fore coxa anteriorly with short black hairs and five or six black lateral and apical setae of various length in one row. Middle coxa anteriorly and apically with black hairs. Middle and hind coxae with black external seta. Fore femora bare; middle and hind femora with one strong subapical anterior setae. Fore tibia with 3 anterodorsal and 2 posterodorsal setae. Length ratio of fore coxa to femur to tibia to tarsus (segments from first to fifth), 63 : 85 : 99 : 52 : 27 : 19 : 12 : 10. Middle tibia with 3—4 anterodorsal, 3 posterodorsal, 1 anteroventral, 3 or 4 short posteroventral setae. Length ratio of middle coxa to femur to tibia to tarsus (segments from first to fifth), 57 : 110 : 130 : 66 : 35 : 24 : 17 : 12. Hind tibia with 3 anterodorsal, 4—5 posterodorsal, 4 short ventral setae. Length ratio of hind coxa to femur to tibia to tarsus (segments from first to fifth), 45 : 122 : 150 : 40 : 49 : 33 : 20 : 18. All tibiae with strong apical setae; all tarsi simple, with short claws and small pulvilli.

Wing relatively short and narrow, greyish, almost hyaline; veins brown. *R*₁ short, ending at basal 2/5 of wing. Ratio of parts of costa from humeral cross-

vein to M_{1+2} , 44 : 88 : 23 : 14. R_{2+3} and R_{4+5} slightly curved posteriad at extreme apex. M_{1+2} nearly straight. Crossvein *m-cu* weakly concave; ratio of *m-cu* to apical part of CuA_1 , 17 : 30. Anal vein foldlike; anal angle obtuse. Lower calypter yellow, with black cilia. Halter yellow. Abdomen mostly yellow, darkened distad, with black hairs and marginal setae; all segments with narrow dorso-medial brownish stripe becoming dark-brown on last segments; 5th segment mostly brown; 6th segment reduced. Hypopygium brown, with black hairs. 8th segment with 6 macrochetae. Epandrium subtriangular. Hypandrium with apical hooked process. Aedeagus pointed at apex. Two epandrial setae positioned on distal side of epandrium, one of them (dorsal) pedunculate. Three pairs of epandrial (?) lobes yellow-brown, parallel to each other, with rounded apices and short setulae; mid-lateral lobe the longest, with small, weakly sclerotized, apical lamina. Surstylus lamellate, curved ventrad, bare. Cercus short, pointed, yellow, with light cilia.

Female. Similar to male except lacking male secondary sexual characters. Face wide, twice as high as wide. Strong vertical seta present. Antenna longer than head height; 1st flagellomere twice as long as high, with long arista. Length ratio of scape to pedicel to first flagellomere (dorsal to ventral sides) to arista, 15 : 20 : 11 : 26 : 62. Proboscis light-brown short, yellow, with sparse black hairs. Tergum 9+10 with 4 pairs of short thick acanthophorites and long ventral process bearing 2 ventral hairs; cercus short, with rounded apex, bearing several long hairs.

Length: male body without antennae 4.7 mm, female body 5.0 mm, male antennae 1.8 mm, female antennae 1.5, male wing-length 4.7 mm, female wing-length 5.2 mm, male wing-width 1.6 mm, female wing-width 1.8 mm.

Distribution. South Africa.

Etymology. The species is named for Dutch dipterologist, Dr. H. J. G. Meuffels.

Diagnosis. The new species differs from other species of the genus in the longest 1st flagellomere, short subapical arista, normal tarsal pulvilli and bare femora in male, ratio of length to height of 1st flagellomere in female.

Key to known species of *Dactylonotus*

Males

1. Arista basodorsal, positioned near process of pedicel 2

- Arista subapical, positioned in apical third of dorsal side of 1st flagellomere 3
- 2. Middle femora with two ventral rows of black setae, nearly as long as femora diameter; tarsal pulvilli normal *grandicornis*
- 4. 1st flagellomere 4.5 times longer than high; arista half as long as 1st flagellomere . . . *meuffelsi*
- 1st flagellomere twice longer than high; arista slightly shorter than 1st flagellomere (New Zealand) *formosus*

Females

1. Arista subapical, twice longer than 1st flagellomere, which twice longer than high *meuffelsi*
- Arista dorsal, shorter than 1st flagellomere, which thrice longer than high *rudebecki*
- Arista basodorsal, 3.5 times longer than 1st flagellomere, which 1.6 times longer than high *grandicornis*

Acknowledgement

I express sincere gratitude to Dr. Brian Pitkin for his kindness in giving me the opportunity to study the collections of the Natural History Museum (London).

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Received 20.III.1998