

# Description of a new species of *Pyrgotina* Malloch (Diptera, Pyrgotidae) from the Cape Province, South Africa

by

A. C. VAN BRUGGEN

*Port Elizabeth Museum, Port Elizabeth, South Africa*

While checking Pyrgotidae in the entomology department of the Transvaal Museum, Pretoria, attention was drawn to a series of *Pyrgotina* specimens, which proved to belong to an undescribed species. The writer is indebted to the authorities of the Transvaal Museum for granting permission to study and describe the material. The student of South African Pyrgotidae is referred to the author's forthcoming paper (VAN BRUGGEN, 1961).

Subfamily Pyrgotinae, Tribus Pyrgotini

*Pyrgotina* Malloch, 1929

Ann. Mag. nat. Hist. (10) 3 : 252 (March)

syn. *Trichellopsis* Bezzi, 1929

Proc. Linn. Soc. N. S. W. 54 : 2 (May), *nomen nudum*

*Pyrgotina antidorcas* nov. spec.

FEMALE. — Head pale yellowish brown with dark brown spots arranged as follows: one below the eye, four in a transverse row between the eyes on the hind margin of the vertex and one or two behind the eyes and close to the others. There are also two stripes from the hind margin of the vertex to the base of the antennae. Both spots and stripes show a considerable variation. Eyes dark blackish brown, greatest width at the middle, about twice as long as wide. Frontal triangle inconspicuous. Frons slightly prominent at base of antennae. Vertex and frons at antennae about equal in width, always more than three times an eye. Antennal foveae shallow, separated by a wide and blunt keel; these parts are glossy yellowish white. Antennae brown, somewhat darker than the head, about half the length of an eye. Third segment somewhat more than twice as long as wide, with a blunt apex; arista longer than antenna, covered with a short and fine pubescence. Hairs and bristles on basal and second segments black, the third with short brown pubescence. Proboscis stout and long, brown; maxillary palpi straight, paler brown, with scattered black bristles, the terminal one the largest. Cephalic bristles reduced and not differentiated, black.

Dorsum of thorax pale yellowish brown with four brown stripes; the lateral consist of a circular and a longish oval spot. Scutellum brown; pleura pale yellowish brown with one or more dark brown spots, usually on the pteropleuron. Most parts of the thorax are covered with widely spaced short black hairs. Many bristles are reduced or hardly differentiated; there is some variation in the development of the bristles, but as a rule the following can be distinguished: one pair of short and stout scutellars, one pair of short and weak prescutellars, two pairs of short and weak posterior supra-alar bristles, one (or more) pteropleural(s), one sternopleural, two (or more) mesopleurals and two notopleurals. So-

metimes also a short and weak humeral and a pair of weak scapulars may be distinguished. All thoracic bristles are black.

Legs comparatively long, brown, beset with rows of short black hairs. Some small black bristles occur on the ventral surface of the fore femora and the coxae. Tarsal claws dark brown, long and thin; pulvillii large, yellowish-white.



Fig. 1. *Pyrgotina antidorcas* nov. spec. Right wing of paratype, slide P3, enlarged. E. P. ENGEL del.

Wings (fig. 1) with a pattern of brown markings. Veins mainly brown, some darker, viz., the cross-veins, the distal ends of the longitudinal veins (except the sixth) and parts of the first and second veins. The subcosta is barely pigmented and hardly visible. The fifth and sixth veins are complete and reach the margin of the wing, but have lost their pigment at the ends. The second vein has a short and rather thick appendix, directed backwards. The first vein bears an irregular row of short, rather stout, dark, neatly spaced bristles, sometimes so irregularly that at some places two rows can be seen. Subcostal cell long and very narrow. The marginal cell is also long and narrow, the veins above and below subparallel. The same applies in a lesser degree to the submarginal cell. The lower cross-vein is almost straight. The pattern is formed by differences in the microtrichiae on the wing membrane, viz., rather stout, densely placed, dark microtrichiae for the brown markings and thinner, widely spaced, pale microtrichiae for the pale spots. Near the base of the wing microtrichiae are absent on the unpigmented spots. Minor variations occur frequently. A very characteristic feature of the wing pattern is the large hyaline spot at the end of the discal cell which at first sight gives the impression of a hole in the membrane. Halteres comparatively large, yellowish brown, knobs flattened.

Abdomen brown, covered with short brown hairs. Postabdomen (oviscape) shiny, beset with black hairs, thick; the last third is bent downwards. Seen from above the oviscape has a blunt apex and is only slightly tapering towards the end. Protruding internal parts of ovipositor slightly shorter than oviscape, yellowish-brown, aculeus long, thin and sharply pointed, brown.

Measurements. Body length 10—11 mm (small specimens) or 16—19 mm (large specimens).

Wing 10—10.5 × 3.5 mm (small specimens) or 12—13 × 4—4.5 mm (large specimens).

Material examined: Holotype ♀ and 6 paratypes ♀♀, Union of South Africa, Cape Province, Namaqualand, 9 miles S of Springbok, at light, 18—20.X.1954, A. J. T. JANSE (Transvaal Museum, Pretoria).

The series consists of four large and three smaller specimens, a large one having been chosen as holotype. The type locality is named after the well-known South African antelope, the springbok (*Antidorcas marsupialis*); therefore the new species will be known as *Pyrgotina antidorcas*.

BEZZI (1929, p. 2) was the first to recognize the taxon as a genus which he named *Trichellopsis*, but without even giving a diagnosis or reasons why he wanted to separate it from *Tephritopyrgota*; therefore *Trichellopsis* Bezzi, 1929, must be considered a *nomen nudum*, although it has been widely used by various authors (e.g. ACZÉL, HENDEL). Very probably this is one of the many cases in which one author has followed the other without checking the actual publication. MALLOCH drew up BEZZI's paper from manuscript notes after the Italian entomologist had died; this is perhaps the reason for the omission of the description of *Trichellopsis*. Fortunately another name, *Pyrgotina*, proposed by MALLOCH in 1929, is available. The genus is characterized by the almost complete absence of cephalic bristles and by the reduction of many of the thoracic bristles. As a rule ocellars, verticals and orbitals are absent on the head and dorsocentrals, presuturals and humerals are absent on the thorax. Type of the genus is *Tephritopyrgota muiri* Hendel.

Only three species were known; these and the newly described one can be distinguished as follows:

1. a. Wing pattern rather pale, only terminal and marginal; discal cell mainly hyaline, only some spots at the end . . . . . 2
- b. Wing pattern darker, complete; discal cell at least with a dark spot in the middle . . . . . 3
2. a. Frons very prominent, forming a kind of cone on which the antennae are borne; width of frons three times width of an eye . . . *tipuloides* Hendel
- b. Frons only slightly prominent; width of frons four times width of an eye . . . . . *muiri* Hendel
3. a. Discal cell in wing with numerous hyaline spots on dark background. Third segment of antenna black . . . . . *tephritoides* Hendel
- b. Discal cell in wing with large hyaline spot at end. Third segment of antenna brown . . . . . *antidorcas* nov. spec.

#### References

- BEZZI, M., 1929, Australian Pyrgotidae. *Proc. Linn. Soc. N.S.W.* 54 : 1—20.
- BRUGGEN, A. C. VAN, 1961, Two new species from the Transvaal, with a preliminary checklist of the Pyrgotidae of Southern Africa (Diptera). *Journ. ent. Soc. S. Afr.* 24 : in the press.
- HENDEL, F., 1913, Neue Beiträge zur Kenntniss der Pyrgotinen. *Arch. Naturgesch.* 79A, (11): 77—117.
- MALLOCH, J. R., 1929, Exotic Muscaridae (Diptera). — XXIV. *Ann. Mag. nat. Hist.* (10) 3 : 249—280.

---

Aangeboden. Diverse prepareerbenodigdheden, zolas Zeiss Winkel-microscoop met ocul. 6,3 × en 12,5 × en obj. 4 ×, 10 ×, 40 × en 100 ×, microscopeerlampje, exsiccator, weegschaaltje, indectomieschaartje enz.

W. G. DEGENHARDT, p.a. D. VAN ZANEN, Westerdokstraat 15huis, Amsterdam-C.