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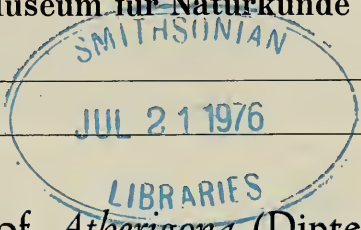
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Some species of *Atherigona* (Diptera, Muscidae) collected by Prof. E. LINDNER in Africa

By J. C. Deeming

I am most grateful to Professor LINDNER for entrusting me with the study of a collection of *Atherigona* adults made by him in Africa. This collection consists of 37 specimens, of which, unfortunately, nearly all are females. As it is unwise to attempt identification within this genus on female material alone, the bulk of the collection must for the present remain unidentified. Those specimens that can be identified are systematically treated below. The system of numbering of male tergites follows that of VENTURI (1968). The material is deposited in the Staatliches Museum für Naturkunde in Stuttgart.

Atherigona (s.s.) *tetrastigma* Paterson 1956: 169 (fig. 3)

This species was described from a single male from Tanzania and to the best of my knowledge has not since been recorded. A single male, labelled „Makoa T.T.O.-Afr., 9. i. 1959, LINDNER leg., Lichtfang“, agrees with the original description in all respects but for that of the absence of the hypopygial prominence, but there is in this and other specimens that I have seen a slightly raised, obtusely conical prominence on the apparent pregenital tergite that might easily be interpreted as being a hypopygial prominence.

Other specimens that I have seen are two males and a female in the Canadian National Collection labelled „Mbau, N. Kivu, Zaire, 920 m, 8—21. xii. 1971, H. Falke“. A description of the female follows: Apart from the usual sexual differences, differing from the male in having fore femur black on apical quarter, fore tibia black on all but extreme base and hind tibia blackish brown on all but extreme base. The ground colour of the pleura is darker than in the male, but the dense yellow dust clothing it gives it the impression of being yellow. Abdomen subshining through weak yellowish dust on tergites; a pair of widely separated long rectangular shining black spots present on tergite 4 and a pair of similar but smaller and more oval spots on tergite 5; tergite 8 (fig. 3) brown, lacking a median lobe, cleft medially almost to hind margin and with the usual pair of separated sclerites present but small, narrow and scarcely discernable.

Atherigona (s. s.) *naqvii* Steyskal 1966: 53

This species is widely distributed throughout the tropics and subtropics of the Old World, from the Canary Islands through Africa and Asia to northern Australia. Its host plants have been recorded by PONT (1973: 46–47) and DEEMING (1971: 160) and the immature stages described by DEEMING (1971: 160). A single male is labelled „Daan Viljoen, S.W.A., 19–21. i. 1970, LINDNER leg.“.



Fig. 1: *Atherigona falcata* (Thomson), male, trifoliate process in (a) ventral view and (b) profile.

Atherigona (s. s.) *falcata* (Thomson) (*Coenosia*) 1869: 560 (figs. 1–2). PONT (1973: 43–44) listed the synonymy of this species, including its misidentifications, recorded its known distribution as being from India to China and Australia, its hostplants and seasonal distribution in India and figured (p. 93) the diagnostic characters of male and female terminalia and male fore tarsus. A single male labelled „Ongeama, S.W.A., 23–28. i. 1970, E. LINDNER leg.“ is present in the collection, which shows the species to have a much wider distribution than was previously known. It is, however, most unusual to find such a discontinuous distribution in an *Atherigona* species. Of other species of this genus that occur both in Africa south of the Sahara and the Orient (*soccata* Rondani, *pulla* Wiedemann and *naqvii* Steyskal) there exists in collections a rich material from the Middle East, the Mediterranean and North Africa also. Furthermore, of those African species of this subgenus that occur also in the Malgasian Region, none has yet been recorded from Asia.

In the absence of a detailed description of this species I redescribe the Ongeama male as follows: Head of a dark ground colour on upper occiput, ocellar triangle and superior orbits, otherwise yellow, densely grey dusted; interfrontalia yellow, slightly dilated anteriorly; 4 pairs inferior orbital bristles; vibrissa with 2 moderate bristles and a few hairs at base; parafacialia at widest part as wide as interfrontalia at middle; first and second antennal segments and base of third yellow, the remainder of third black; arista dark brown, somewhat paler basally; palpus yellow. Thorax black, with humerus and propleuron yellow, densely grey dusted throughout and with no trace of darker longitudinal vittae on mesonotum; 2 + 4 dorsocentral bristles, of which all but the first and second postsutural pairs are well developed; scutellum with lateral marginal bristle 0.86 of length of apical marginal and bristle preceding lateral marginal 0.33; propleuron with the usual 1 long and 1 moderate bristle and a fine hair, this last equal to the upper prostigmatal; sternopleuron with lower bristle situated closer to the more posterior of the 2 upper bristles, their bases forming an

isosceles triangle. Legs yellow, but fore tibia and tarsus slightly brownish, this latter bearing a row of short anterodorsal hairs on segments 3—5. Wing hyaline, slightly and narrowly grey clouded apically; veins yellow; anterior crossvein situated at 0.43 of length of discal cell; squamae and haltere dirty yellowish white. Abdomen yellow, moderately yellowish grey dusted dorsally on tergites; tergite 4 with a pair of well separated oval black spots occupying about one third of its length; tergite 5 with a pair of similar but smaller spots; hypopygial prominence (fig. 2) knoblike;

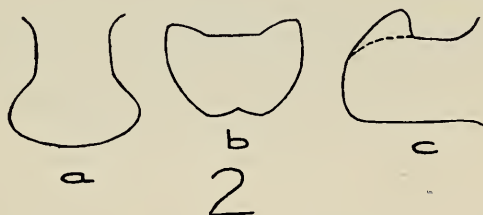


Fig. 2: *Atherigona falcata* (Thomson), male, hypopygial prominence in (a) dorsal view, (b) apical view and (c) profile.

trifoliate process (fig. 1) yellow, with lobes black on all but their extreme bases, the stem four times as long as the median lobe. Length about 4.3 mm, of wing 3.8 mm.

This species would run to couplet 31 in my 1971 key (p. 139) and is separable from both the species contained therein (*ponti* Deeming and *secrecauda* Séguy) on the structure of the trifoliate process.



Fig. 3: *Atherigona tetrastigma* Paterson, female, eight tergite.

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References

- DEEMING, J. C. (1971): Some species of *Atherigona* Rondani (Diptera, Muscidae) from northern Nigeria, with special reference to those injurious to cereal crops. Bull. ent. Res. 61: 133—190, 168 figs.
- PATERSON, H. E. (1956): East African Muscidae (Diptera) (Ergebnisse der Deutschen Zoologischen Ostafrika-Expedition 1951/1952, Gruppe LINDNER, Stuttgart, Nr. 20). Beitr. Ent. 6: 154—179, 10 figs.
- PONT, A. C. (1973): A Review of the Oriental Species of *Atherigona* Rondani (Diptera, Muscidae) of Economic Importance. p. 27—102, figs. 2—22. In JOTWANI, M. G. and YOUNG, W. R. (Editors) Control of Sorghum Shoot Fly. Oxford and IBH Publishing Co., XV + 324 pp., 42 figs.
- STEYSKAL, G. C. (1966): A new species of *Atherigona* Rondani causing damage to wheat plants in West Pakistan (Diptera: Muscidae). Proc. ent. Soc. Wash. 68: 53—56, 5 figs.
- VENTURI, F. (1968): La struttura morfologica addominale del maschio di *Atherigona quadripunctata* Rossi (Dipt. Muscidae Chelisiini). Frustula ent. 7: 1—22, 14 figs.

Anschrift des Verfassers:

Mr. J. C. Deeming, Institute for Agricultural Research, Samaru, P.M.B. 1044 Zaria, Nigeria.

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Autor(en)/Author(s): Deeming John C.

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