

***Morinia argenticincta*, An only fly species of *Morinia*
known from the Oriental region (Diptera: Calliphoridae)**

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Genus *Morinia* is represented by a single species, *Morinia argenticincta* in the Oriental region (Senior-White et al., 1940). The species are distinct by lacking any pale hair on the body. According to Rognes (1991) this genus shows similarity to the Nearctic genus *Mellanodexmia*. Diagnosis: body dark with thin layer of brownish dusting; occiput concave; virissae well above oral margin; antenna short; arista plumose; palpi short, black; propleuron bare, prosternum bare, acrostichals 1+1; dorsocentrals 2+3; intra-alars 0+2; humerals 2; posthumeral 1; supra-alar 1; sternopleurals 1+1; wing veins infuscated; first posterior cell (R5) slightly open; halteres black.

***Morinia argenticincta* (Senior-White, 1923)**

Idiopsis argenticincta Senior-White, 1923. *Mem. Dep. Agric. Ind., (Ent.)* 8:48. *Pollenia argenticincta*: Senior-White et al., 1940. *Fauna Brit. India. Dipt.*, 6:125. *Anthomyia nigerrima* Herting, 1961. *Fleig. Palaark. Reg.*, 9:1-35. *Morinia argenticincta*: Kurahashi & Thapa, 1994. *Jap. Soc. Sanit. Zool.*, 45:216.

MALE: Body length 6.8-7.0 mm. Head: Eyes bare, subholoptic, upper facets enlarged; frons dark brown, reduced to fine line as it approaches vertex; parafrofrontalia silvery grey; frontal bristles well developed; fronto-orbital bristles absent; ocellus with ocellar and postvertical bristles; vertical and outervertical bristles present; prevertical bristles absent; epistome blackish, bare; face shining black, facial carina absent; jowls and medianae brownish, bare; genae dark grey with large yellowish spot; postgenae greyish black, both with black hair; vibrissae present well above oral margin; peristomal bristles well developed; antennae dark brown; length of 3rd segment about 3X of 2nd; arista dark brown, long, plumose; palpi black, bare.

Thorax: Black with grey dusting; humerus and postalar callus concolorous with dorsum; prothoracic spiracle brown; prosternum and propleuron bare; postalar declivity bare; supraspiracular convexity bare; suprasquamal ridge bare. Chaetotaxy (Fig. 4): Acrostichals 1+1; dorsocentrals 2+3; intra-alars 0+2; presutural present; humerals 2; posthumeral 1; supra-alar 1; post alars 2; notopleurals 2; lateroscutellars 3; apicoscutellar and discoscutellar 1 each; sternopleural 1+1; propleural and prostigmatic present.

Wings: Infuscated along veins; broad anterior dark stripe

present; stem vein (R) bare; R1 bare; R4+5 setulose on both dorsal and ventral sides; first posterior cell (R5) open; epaulet and basicosta black; subcostal sclerite, alar and thoracic squamae pale, bare on dorsal surface; halteres black.

Legs: Black; fore- and hind femora with bristles on both dorsal and ventral sides, midfemur with bristles on ventral side only; fore- and hind tibiae with 2 bristles at middle and 3 at apex; midtibia with series of bristles.

Abdomen: Shining black; tergites 2 and 3 with lateral marginal bristles; tergite 4 with discal bristles; tergites 4 and 5 with strong marginal bristles, sternites 1-5 with long black hair; hypopygium conspicuous. Male genitalia: Fifth sternite (Fig. 5); Cerci and paralobi (Fig. 6); Aedeagus and parameres (Fig. 7)

FEMALE: Body length 7.5-9.0 mm. Similar to male except: upper facets of eye not enlarged, frons more broader, upper part of parafrofrontalia shining black, fronto-orbital bristles present, claws strong. Sternites 1-5 (Fig. 3). Female genitalia: Dorsal view of ovipositor (Fig. 1); Ventral view of ovipositor (Fig. 2).

Material examined: India: Uttarakhand: Nainital-1938m (2♂♂, 1♀♀) 7.x.2001. Coll. Inderpal Singh Sidhu.

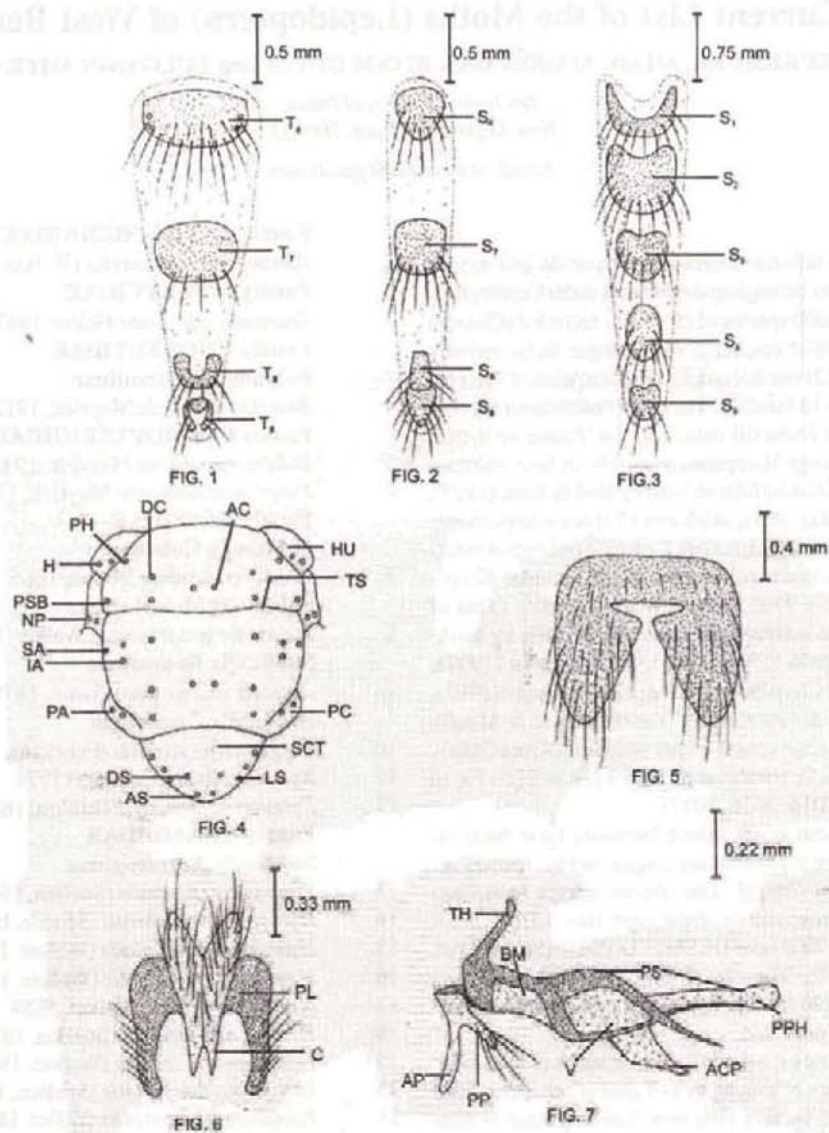
Distribution: India (Uttarakhand), Nepal and Japan.

Holotype depository: IARI, New Delhi, India.

Remarks: This is the only species under the genus *Morinia* known from the Oriental region. This species has been listed under the genus *Pollenia* Robineau-Desvoidy by James (1977) and Schumann (1986).

References

- James, M. T. 1977. *A Catalogue of the Diptera of the Oriental Region, Vol III, Suborder Cyclorrhapha* (Ed. Dalfinado & Hardy): 1-763.
- Rognes, K. 1991. Revision of the species of *Pollenia* Robineau-Desvoidy described by Conillo Rondani (Diptera: Calliphoridae). *Ent. Scand.*, 22(3): 365-368.
- Schumann, H. 1986. *Catalogue of Palaearctic Diptera, Vol. 12 Calliphoridae-Sarcophagidae* (Ed. Soos & Papp). Elsevier Science Publ. Co., New York: 1-265.
- Senior-White, R., Aubertin, D. & Smart, J. 1940. *The Fauna of British India, including the remainder of the Oriental region, Diptera Vol. VI, Family Calliphoridae*. Taylor and Francis, London.



Figs. 1-7. *Morinia argenticincta*. 1 Dorsal view of ovipositor, 2 Ventral view of ovipositor, 3 Sternites I-V of female, 4 Dorsal view of chaetotaxy of thorax, 5 Sternite V of male, 6 Cerci and paralobi, 7 Aedeagus and parameres
 Abbreviations used: AC - Acrostichal bristles; ACP - Acrophallus; AP - Anterior paramere; AS - Apicoscutellar bristles; BM - Basal membrane; C - Cerci; DC - Dorsocentral bristles; DS - Discoscutellar bristles; H - Humeral bristles; HU - Humerus; IA - Intra-alar bristles; LS - Lateroscutellar bristles; NP - Notopleural bristles; PAB - Postalar bristles; PC - Postalar callus; PH - Posthumeral bristles; PL - Paralobi; PP - Posterior paramere; PPH - Paraphallus; PS - Phallosome; PSB - Presutural bristles; S1 - Sternite 1; S2 - Sternite 2; S3 - Sternite 3; S4 - Sternite 4; S5 - Sternite 5; S6 - Sternite 6; S7 - Sternite 7; S8 - Sternite 8; S9 - Sternite 9; SA - Supra-alar bristles; SCT - Scutellum; T6 - Tergite 6; T7 - Tergite 7; T8 - Tergite 8; T9 - Tergite 9; TH - Theca; TS - Transverse suture; V - Ventralia.