

A NEW SPECIES OF *WOHLFAHRTIA* BRAUER AND BERGENSTAMM
(DIPTERA, SARCOPHAGIDAE) FROM IRAQ

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ABSTRACT

Wohlfahrtia longicorporis sp. nov., from Iraq described, illustrated and distinguished from related species. The adults were reared from larvae collected from ulcer of a human face.

Wohlfahrtia Brauer and Bergenstamm is one of most important genus, which contains 19 species (Pape, 1998), some of these produce myiasis in mammals (Verves, 1985). Taxonomic revision of this genus has been carried out by the following authors: Rohdendorf (1956), Zumpt (1965) and Pape (1996).

Wohlfahrtia longicorporis sp. nov.

Body: Robust, length 10.0-14.0 mm, grey-blackish, covered by densely whitish grey pollinose. Male: Head (fig 1a) usually narrower than its height; vertex narrow with pairs of inner vertical bristles; outer vertical bristles absent; post vertical bristles weak and about 1/3 length of inner vertical bristles; ocellar triangle often slightly raised, with a pair of ocellar bristles; lower pair twice as long as upper ones; ocelli brown in color; frons dark brown-black with golden pollinose, frons semi-narrow, without proclinate orbital bristles, with 10-11 pairs of frontal bristles; parafacial, facial and parafacial dark to brown-black and covered with densely whitish pollinose; lower half of parafacial possess a row of setae; facial groove concave without carina; facial ridge with 4-5 bristles in its 1/5 basal part; epistoma dark brown; antenna (fig 1b) with the three segments reddish brown in color, length of third segment about twice as long as second segment; arista pubescent, thickened at the base then gradually tapering toward apex; its basal half covered with very short hairs. The maxillary palps (fig 1c) are nearly clavate in shape, reddish in color, their distal two thirds are provided with strong short and long bristles. Labrum-epipharynx (fig 1d) cone in shape, its apodeme strongly sclerotized, filiform, its apical part cub shaped; Mentum (fig 1e) brown, truncate cone in shape, provided with long and short bristles, especially near the apex. Head in female (fig 1f) similar to that of male except frons is wider; vertex with outer vertical bristles and with proclinate and reclinate fronto-orbital bristles.

Thorax: With mesonotum grey, provided with three black longitudinal stripes and covered with whitish pollinose; and provided with several and various bristles; acrostichal bristles 0+1; dorsocentral bristles 2+2; notopleural bristles 4; posthumeral bristle 0; humeral bristles 3; intra-alar bristles 1+1; post-alar bristles 2; supra-alar bristles 2; scutellum bristles 3+1; sternopleural bristles 2:1; stigmal bristle 1; propleural bristle 1 (fig 2a). Anal ridge of mesopleural plate with 6-7 bristles, mesothoracic spiracles ovate in shape and grey in color. Depressed part of proepisternum bar; prosternum and metasternum setose; subanal knob circular in shape, black in color and pubescent. Metathoracic spiracles subtriangular in shape,

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dark brown in color. Legs black; femur with complete posterodorsal and posteroventral rows of bristles; fore tibia (fig 2b) with one posteroventral bristle. Middle femura with anterior row of short bristles extending towards middle; middle tibia (fig 2c) with one anteroventral bristle and two posterodorsal bristles; hind tibia with three anterodorsal and posterodorsal bristles. Wings hyaline, stem vein and subcostal sclerite bare; dorsal surface of r 4+5 with 8-9 setae extending to distance more than half way to cross vein r-m; ventral surface of r4+5 with 4-5 setae occurred only on the node; apical cell of r5 opened; vein M1+2 bends forwards with slightly angle; basicosta yellow; vein CUA1 bare. Lower squama broad, whitish in color with yellow margin and without setae and covered with micropubescent. Upper squama similar to that of lower squama but smaller in size. Tympanic membrane with yellow tuft of setae.

Abdomen: Grey with three black circular and cone spots on each segment; tergite 1+2 combined without marginal bristles (fig 2d); the first sternite in male small (fig 2e), the second sternite which is the largest; third and fourth sternites are nearly similar in shape, and nearly conical in shape; posterior margin of fifth sternite deeply cleft; abdominal sternites except first one provided with 4-5 bristles at their distal end.

Abdomen in female similar to that of male and differ from it by that of fifth sternite (fig 2f) which is rectangular in shape and without cleft posteriorly.

Male terminalia: Tergite 6 reduced; sternite 6 (fig 3a) Y-shaped, connected firmly to syntergosternite 7+8; syntergosternite (fig 3b) with anterior ventral margin produced anteriorly, with two rows of bristles posteriorly; empandrium (tergite 9) dome shaped (fig 3c); posterior arms of hypandrium (sternite 9)(fig 3d) strongly bend; paralobes small with many short bristles (fig 3e); anal cerci (fig 3f) slightly curving anteriorly; united together basally and separated near the 1/3 apical part; 3/4 of its basal part covered with densely long bristles. Phallopodeme (fig 3g) elongate and flattened dorsoventrally. Pregonite (fig 3h) cylindrical in shape without bristles; postgonite (fig 3i) large and hook-like, its interior margin with one long bristle; phallus (fig 3j) strongly sclerotized; its tube widened distally to form a cavity, housing acrophallus; basiphallus without apiphallus; paraphallus swollen, curved and strongly sclerotized; hypophallus globular like in shape tapering at its distal part; ejaculatory duct (fig 3k) circular in shape, moderately sclerotized in its basal half.

Female terminalia: Segments short, non-telescopic; tergite 6 (fig 4a) long with a row of bristles posteriorly; spiracles 6 and 7 located on this tergite; sternite 6 (fig 4b) large, globular like in shape with some bristles on its dorsal surface; tergite 7 (fig 4c) composed of two oval plates which widely separated from each other; its dorsal surface without bristles. Sternite 7 (fig 4d) rectangular in shape, moderate sclerotized laterally and with some bristles. Tergite 8 (fig 4e) Y-shaped without bristles. Sternite 8 (fig 4f) nearly rectangular in shape, with moderate densely bristles on its dorsal surface. Epiproct (fig 4g) triangular in shape, with few bristles, one of which is longer than the rest; hypoproct (fig 4h) triangular with densely bristles; anal cerci (fig 4i) oval shaped with densely long bristles; spermatheca (fig 4j) nearly spherical in shape.

Wohlfahrtia longicorporis sp. nov. is closely related to *W. nuba* (Wiedemann) but differs from it by the following characters: Parafrontal, face and parafacial covered with whitish pollinose; mesonotum covered with whitish pollinose; with 3+1 scutellar bristles; quarter apical of hypophallus strongly tapering to apical word; basal half of ejaculatory duct moderately sclerotized in basal half; and body length moderate 5.2-9.1 mm.

Host: Minced meat and ulcer of human face.

1♂(Holotype), 1♀ (Allotype) and 6♀(Paratype)

Coll. 10.2.2001 (Leg. M. S. Abdul-Rassoul).

Types are deposited in Iraq Natural History Museum collection.

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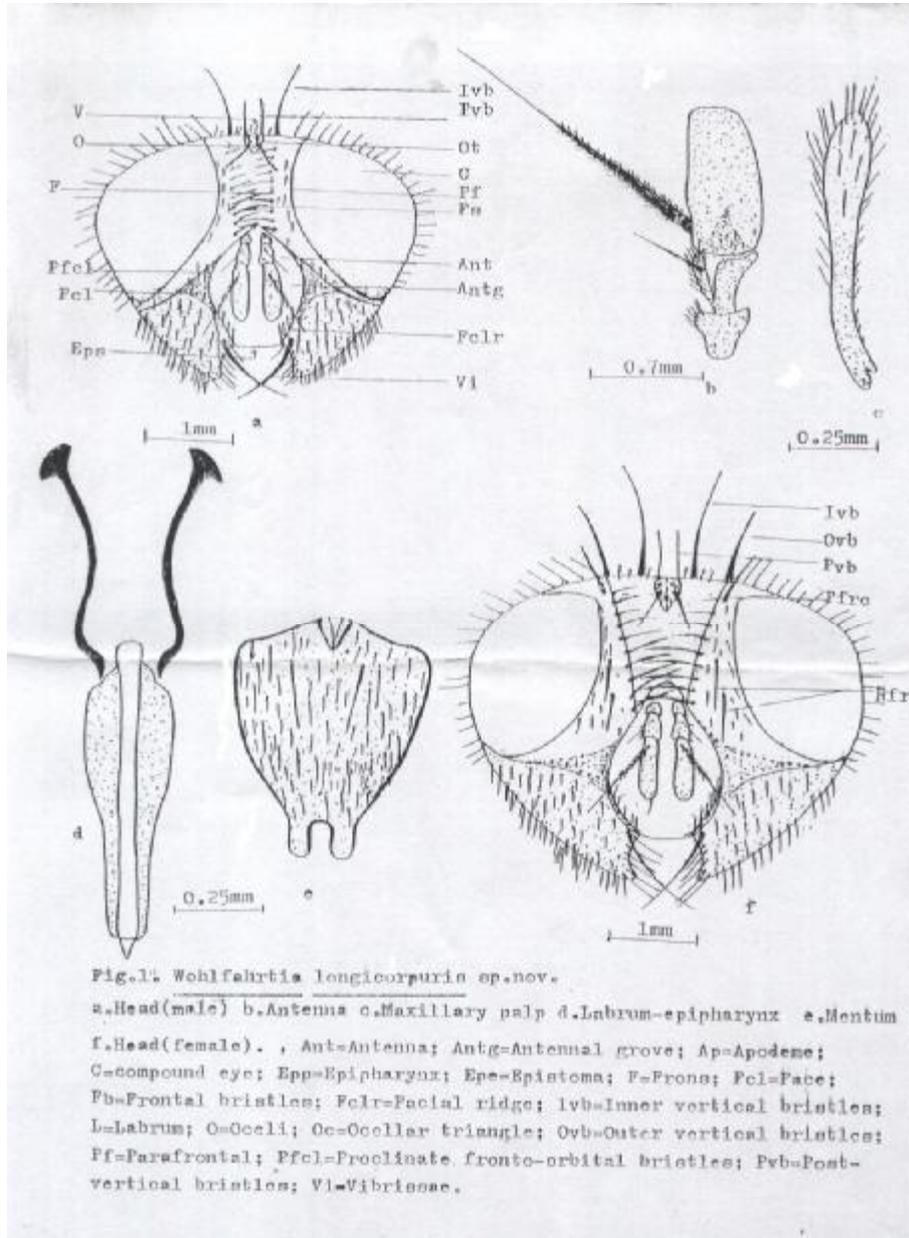
نوع جديد من جنس *Wohlfahrtia* (رتبة ثنائية الاجنحة : عائلة ذبابة اللحم) في العراق .

نبيل عبد القادر مولود* و محمد صالح عبد الرسول**
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الخلاصة

تم وصف و اعطاء الرسوم و تمييز النوع الجديد *Wohlfahrtia longicurpuris* عن الانواع القريبة .

ربيت البالغات من يرقات جمعت من تفرح في وجه احد الأشخاص .
يعتبر جنس *Wohlfahrtia* احد اهم الاجناس و يحتوي ١٩ نوعاً بعضها يسبب التدويد في اللبائن . تمت المراجعة التصنيفية لهذا الجنس من قبل كل من
Pape (1996) و Zumpt (1965) و Rohdendorf (1956) .



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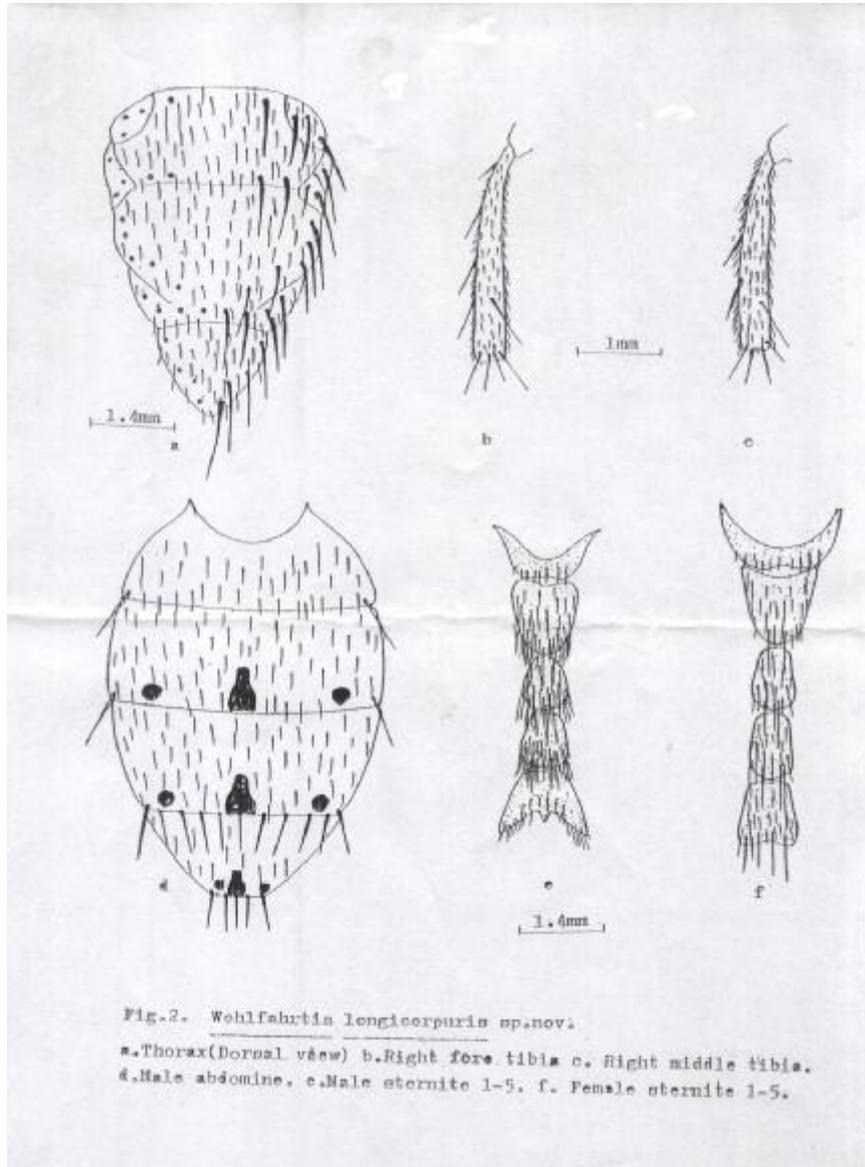
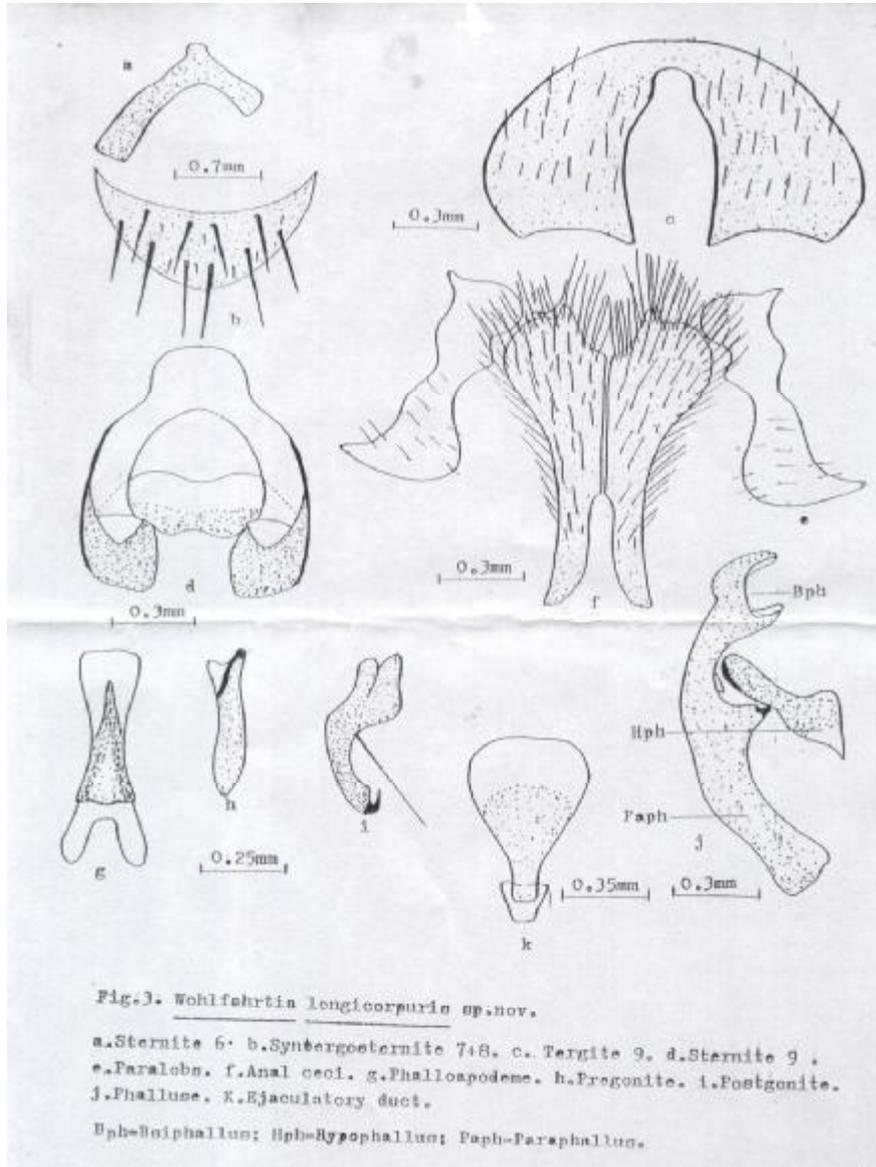


Fig.2. *Wohlfahrtia longicarpus* sp.nov.

a.Thorax(Dorsal view) b.Right fore tibia c. Right middle tibia.
d.Male abdomen. e.Male sternite 1-5. f. Female sternite 1-5.



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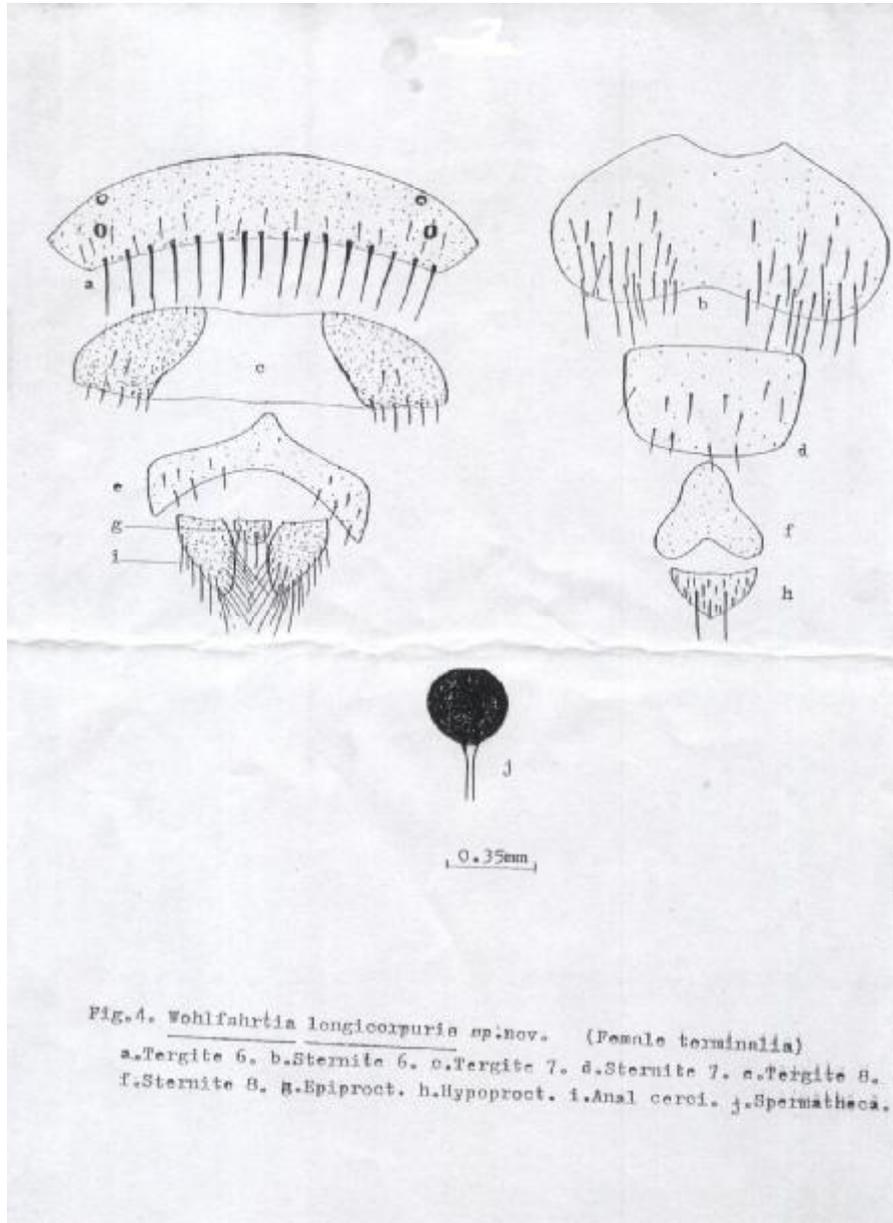


Fig.4. *Wohlfahrtia longicorporis* sp.nov. (Female terminalia)
 a.Tergite 6. b.Sternite 6. c.Tergite 7. d.Sternite 7. e.Tergite 8.
 f.Sternite 8. g.Epiproct. h.Hypoproct. i.Anal cerci. j.Spermatheca.