

## Notes on *Macromesus* Walk. (Hym. Chalcidoidea, Pteromalidae) and description of a new species

By

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When working on chalcids as parasites of bark-beetles I received specimens of a remarkable species from Finland. After seeking in the literature I found that the specimens belonged to *Wesenbergia occulta* Kryg. The genus *Wesenbergia* Kryg. was described by Kryger in year 1943 and the species was captured by him in a wet meadow along an acclivity with spruces, North Sealand, Denmark. In year 1959 M.W. R. de V. Graham published a redescription of *Macromesus amphiretus* Walk. Comparing my specimens with his excellent description I found that they agree very well. It is obvious that *Wesenbergia* Kryg. is congeneric with *Macromesus* Walk. and consequently synonymous with the latter genus. The new synonymy is given as follows:

*Macromesus* Walk. 1848

*Wesenbergia* Kryg. 1943 syn. nov.

*Macromesus amphiretus* Walk. 1848

*Wesenbergia occulta* Kryg. 1943 syn. nov.

*Macromesus amphiretus* Walk. is now known from England, Finland, Poland and Sweden. In Sweden I have bred this species from a bark-beetle, *Phthorophloeus spinulosus* Rey.

In a box with material of *Trigonoderus* and *Epistenia* I got from Smithsonian Institution, Washington, U.S.A., there were many specimens of a species which to my surprise belonged to *Macromesus* Walk. A description of this new species is given below.

### ***Macromesus americanus* sp.n.**

♀. Head blue-violet with metallic lustre, face violet. Thorax dorsally bronze-green, laterally blue. Abdomen dark brown. Antennae with scape yellow, pedicellus yellowish brown, anellus, funicle segments and clava dark brown. Fore-, mid- and hindlegs reddish yellow. Hind coxa basally blue with metallic lustre. All femora and tibia with tint of brown. Wing veins light brown.

Head subglobular. Malar groove strong, between antennal socket and malar groove a supplementary groove which runs nearly parallel with the malar groove but not reaching the base of mandible. Face and vertex with scattered small punctures (with hairs). The eyes ovate, large. Mandibles (right and

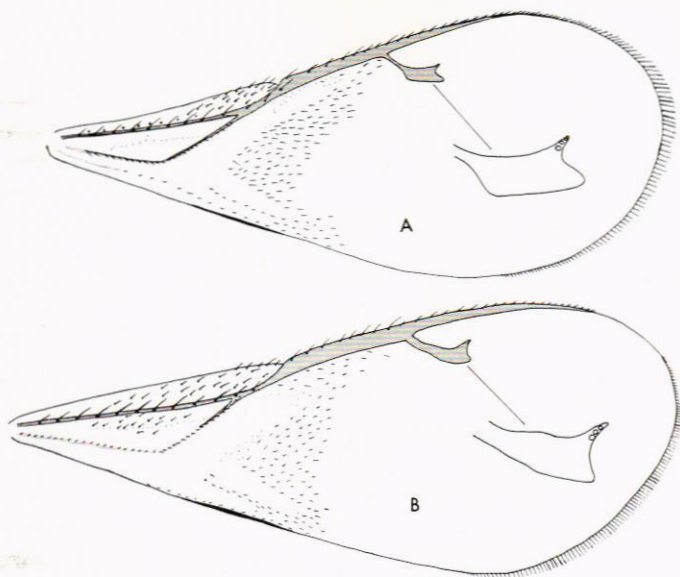


Fig. 1. A. Forewing of *Macromesus amphiretus* Walk.  
B. Forewing of *Macromesus americanus* sp.n.

left) with 3 teeth. Clypeus anterior margin truncate, above the clypeus two pits. Antennae inserted slightly below level of ventral edge of eyes, with formula 11172. Scape short, pedicellus shorter than the first funicle segment, funicle segments longer than broad, the first funicle segment longest. Clava not stouter than flagellum. The whole head fine reticulated, round about malar grooves very fine.

Pronotum short and rounded. The middle lobe of mesoscutum slightly shorter than scutellum. Notaulices complete and deep, converging strongly towards scutellum. Metascutellum large, with puncturation similar with the remaining part of thorax. Propodeum slightly declived with median carina, plica only posteriorly indicated, spiracles subcircular and fimbriae few.

All femora stout. Fore coxae nearly as long as the hind coxae. Fore- and hind coxae above with row of hairs (fig. 2. E.). Fore- and hind tibia with a row of spines. Mid tarsus; the first segment longer than the rest. Hind tibia with a single spur.

Forewing (fig. 1. B.) with marginal vein shorter than the postmarginal vein but longer than the stigmal. Stigma not distinctly separated from the stigmal vein and not so large. Basalcell with hairs, speculum postbasale large.

Gaster lanceolate.

♂. Resembles the female, but has, however, antennae 13-segmented (11173) and funicle segments more fusiform. Gaster oblong.

*Macromesus americanus* sp.n. is very similar to the European species *M. amphiretus* Walk., and the following key will serve to distinguish the new species from the European one.

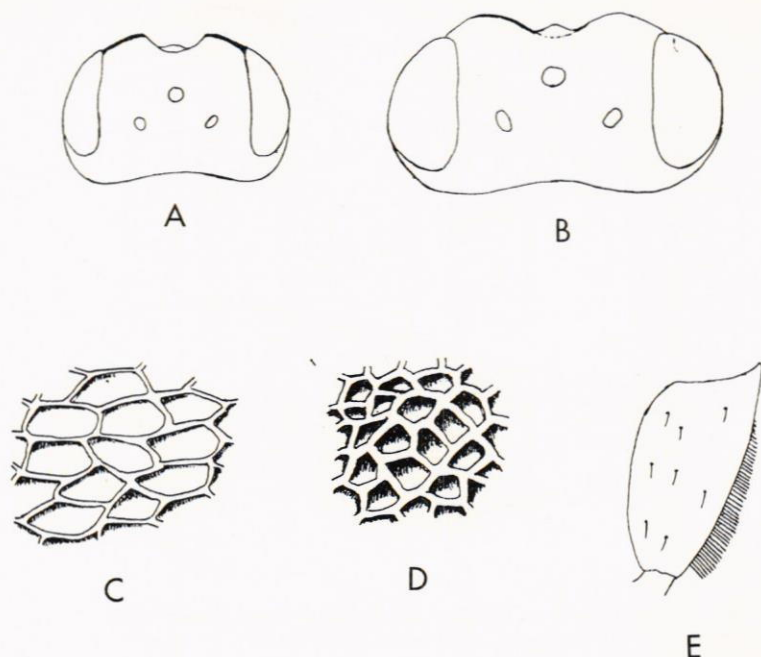


Fig. 2. A. *Macromesites amphiretus* Walk., head in dorsal view., B. *Macromesites americanus* sp.n., head in dorsal view., C. *Macromesites amphiretus* Walk., the reticulation on mesoscutum., D. *Macromesites americanus* sp.n., the reticulation on mesoscutum., E. *Macromesites americanus* sp.n., the fore coxa.

- I. Metascutellum has stronger reticulation than scutellum and scutum. Postmarginal vein shorter than the marginal vein. Stigma large. Basalcell with a line of very small hairs (fig. 1. A.). Mandibles with 2 slightly pointed teeth and a third (inner) obtuse one. Marginal fringe (fig. 1. A.) going around the apex of the forewing.
- M. amphiretus* Walk.
- Metascutellum has not stronger reticulation than scutellum; reticulation similar over the whole thorax and a large part of head. The postmarginal vein (fig. 1. B.) longer than the marginal vein. Stigma (fig. 1. B.) moderately large and not distinctly separated from the stigmal vein. Basalcell (fig. 1. B.) with both large and small hairs. Mandibles with 3 teeth, the third (inner) not obtuse. Marginal fringe (fig. 1. B.) not going around the apex of the forewing . . . . . *M. americanus* sp.n.

There are also some differences in the colour.

Material: *M. amphiretus* Walk. 4 ♀♀ and 2 ♂♂.

*M. americanus* sp.n. 14 ♀♀ and 9 ♂♂.

Holotype: Dragon Mts. Ariz. Cochire Strngh, April 23, 1957, Arizona Cypress, leg. G. Butler and F. Werner.

Allotype: The same locality as for the holotype.

Paratype: 3 ♀♀ and 1 ♂ from the same locality as above.

1 ♀ and 1 ♂ Lodgepole Pine above Suttle lk., Oreg., 6—21—39, hosts: *Cylindrocopturus longulus* (Lec.).

- 1 ♀ (Hopk. U.S. 37558) Middletown, Lake Co., Calif., XI—11—1951, leg. G. M. Thomson.
- 3 ♀♀ and 3 ♂♂ (Hopk. U.S. 34068), Colfax, Cal., I—31—51, *Pseudotsuga taxifolia*, leg. G. C. Trostle.
- 3 ♀♀ and 3 ♂♂ (Hopk. U.S. 21083, 2 specimens 1 ♀ and 1 ♂ are marked with B 5, 3 specimens 2 ♀♀ and 1 ♂ with B 2 and 1 specimen 1 ♂ with B 7) Pine Crest Calif., 6—21—34, *Pinus lambertiana*, *Pinus ponderosa*, leg. K. A. Salman and J. M. Miller.
- 1 ♀ (Hopk. U.S. 33751) B) Placerville, Cal., Eldorado Co., X—1—1946, *Pinus montana*, leg. J. M. Miller.
- 1 ♀ (Hopk. U.S. 31906 e) Yosemite Nat. Pk., VI—11—1956, *Abies concolor*, leg. G. R. Struble.

#### Literature

- GRAHAM, M. W. R. de V.: Rediscovery of *Macromesus amphiretus* Walk. (Hym., Chalcidoidea, Pteromalidae) in Britain, with a discussion of its systematic position. — Ent. Monthly Mag. Vol. **XCIV**; pp. 73—78, 1959.
- KRYGER, J. P.: Two notes on Chalcid Flies. — Ent. Medd. Band **XXII**, pp. 360—363, Copenhagen 1943.
- WALKER, F.: List of the Hymenopterous Insects in the Collection of the British Museum. Part 2. — Chalcidites Additional species, London. 1848.