

THE TYPE-SPECIES OF *GONIURELLIA* HENDEL, 1927 (INSECTA:
DIPTERA: TEPHRITIDAE). Z.N.(S.) 2157.

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Goniurellia was created by Hendel (1927) as a subgenus of *Trypanea* [sic], properly *Trupanea* Schrank, 1795, without giving sufficient characters to differentiate it from *Trupanea* s. str. Munro (1955, 1957) considered *Goniurellia* a distinct genus, and gave (1957:1038-1039) detailed characterizations for *Trupanea* (= *Trypanea*), *Goniurellia* and his new genus, *Dectodesis* (1957: 1044).

2. When creating *Goniurellia* (1927:198), Hendel designated as its type-species, what he believed to be *Trypeta augur* Frauenfeld, 1856, described it and figured its wing. A comparison of Hendel's figure and description of *Trypanea (Goniurellia) augur* with the original description and wing figure of Frauenfeld's *Trypeta augur*, shows that the two authors dealt with different species, and that Hendel misidentified the type-species of *Goniurellia*. Frauenfeld's species is characterized in his description and figure as follows: the brown subapical wing spot has in the basal cell a rounded hyaline indent; the brown ray which crosses the discal cell, although sometimes interrupted, ends on the fifth vein (Appendix 1, Fig. 1). Hendel's description and figure differ from Frauenfeld's in lacking a rounded hyaline indent in the basal cell, and in the shorter brown ray of the discal cell (Appendix 1, Fig. 2).

3. Frauenfeld's types are probably lost (Hardy, 1968:107-108 per. commun. 1975, and our investigations). Fifteen specimens collected at A-Tur (Sinai Peninsula), the type locality of *augur* Frauenfeld (in the collection of the Department of Zoology, Tel Aviv University) fit Frauenfeld's description. They are also characterized by a very long geniculate proboscis, the haustellum and labella of which are each longer than the head, and by four scutellar bristles - characters not used by Frauenfeld in his description of TEPHRITIDAE. *Goniurellia augur* sensu Hendel (1927) has a short proboscis and only two scutellars. In 1927 (: 200) Hendel included in *Goniurellia* his new species *G. ensina*, among other species; in 1931 (: 11) he added his new species *G. rostrata*. Steyskal and El Bialy (1967) considered these two species as synonyms of *Trupanea kingi* (Bezzi, 1924). We agree with Steyskal and El Bialy, because the differences given by Hendel (1931) to separate *rostrata* from *ensina* and *kingi* do not warrant specific differentiation. Moreover, having checked the holotype of *ensina* and the type series of *kingi*, we conclude that all three are synonyms of *augur* Frauenfeld. The differences mentioned above between *augur* Frauenfeld and *augur* sensu Hendel necessitate their separation into different genera.

We agree with Munro's opinion (per. commun.) that *augur* Frauenfeld, which is distributed in Israel, Egypt and the Sudan, belongs to the African genus, *Dectodesis* Munro, which is characterized by a very long geniculate proboscis.

4. Hendel's concept (1927) of what he thought to be *augur* Frauenfeld applies to at least two hitherto unnamed species (Freidberg and Kugler, in preparation). Hendel (loc. cit.) also included in *Goniurellia* the subspecies *G. augur tridens* (Hendel), which was described and illustrated in 1910 (:106-7, pl. 1, fig.4) as a variation of *Urellia augur* (Frauenfeld). Checking the lectotype of *tridens* Hendel (in the Naturhistorisches Museum, Wien), as well as other specimens which fit Hendel's descriptions, showed that in addition to its specific wing pattern, *tridens* has short haustellum and labella, and therefore, cannot be included in *augur* Frauenfeld. Based on these, as well as on additional characters, *tridens* is, without doubt, a distinct species.

5. We suggest that *G. tridens* (Hendel) should be the type-species of *Goniurellia* rather than *augur* Frauenfeld, for the following reasons:-

- (a) A type of *G. tridens* (a lectotype female designated by Hardy, 1968:127) is accessible (Recommendation 69B(6)), whereas the types of Frauenfeld are probably lost (Hardy, 1968:107-108).
- (b) When designating *augur* sensu Hendel as the type-species of *Goniurellia*, Hendel writes: "Rüssel relativ kurz, Labellen nur mässig verlängert". This is the case in *G. tridens* and the other species included by Hendel in *Goniurellia*, except in *G. ensina* and *G. rostrata* which are synonyms of *augur* Frauenfeld.
- (c) The designation of *augur* Frauenfeld as the type-species of *Goniurellia*, would bring about the following unnecessary nomenclatural actions:
 - (1) *Dectodesis* Munro would have to become a synonym of *Goniurellia*, and its three species would change their well established generic name.
 - (2) Creating a new genus to include the species of *Goniurellia* except *augur* Frauenfeld.

Whereas designating *G. tridens* as the type-species of *Goniurellia* would render these actions unnecessary.

6. In order to avoid confusion and to maintain stability of nomenclature, it is requested that the International Commission should take the following actions:-

- (1) use its plenary powers to set aside Hendel's (1927) designation of *Trypeta augur* Frauenfeld as the type species of *Goniurellia*, and having done so, designate *Urellia augur tridens* Hendel, 1910 to be the type-species of that genus;

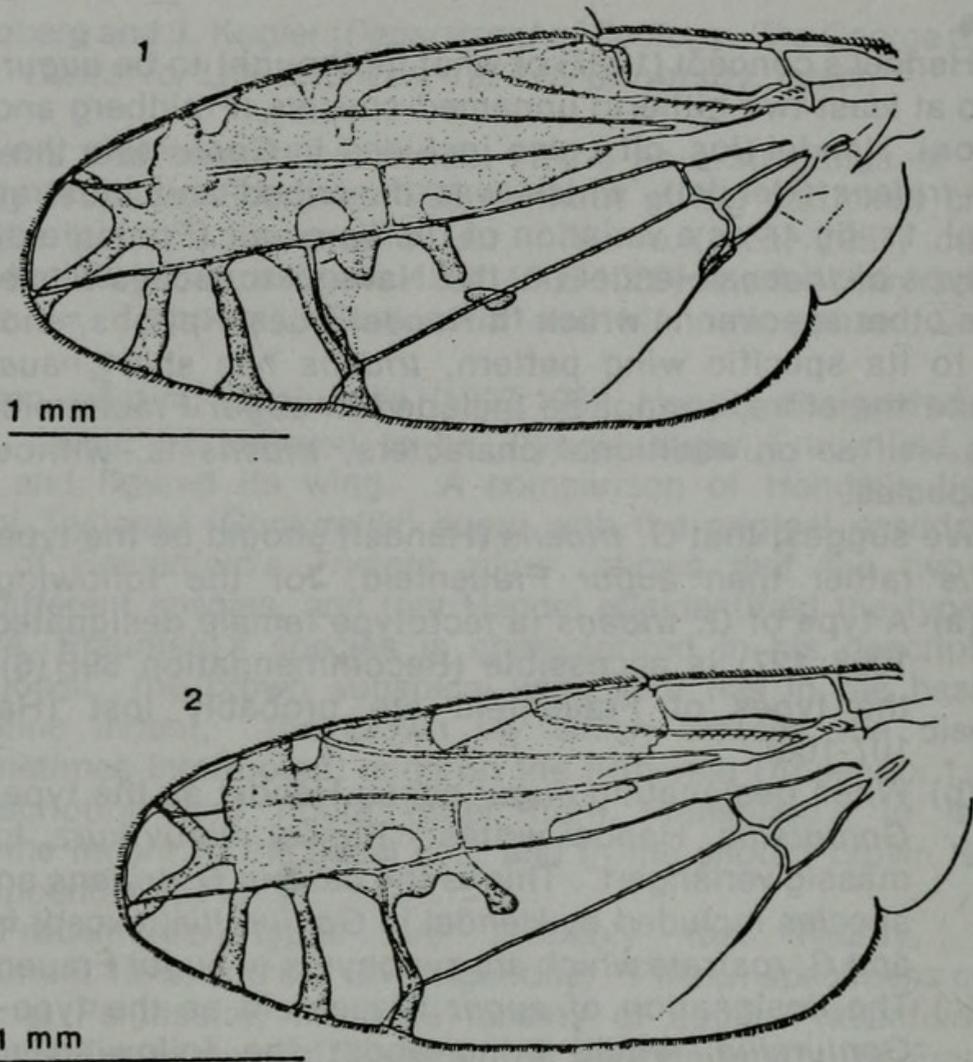


Plate 1

Fig. 1: *Trypeta augur* Frauenfeld, 1856, wing.

Fig. 2: *Trypanea (Goniurellia) augur* sensu Hendel, 1927, wing.

- (2) place the generic name *Goniurellia* Hendel, 1927 (gender: feminine) type-species by designation under the plenary powers in (1) above, *Urellia augur tridens* Hendel, 1910 on the Official List of Generic Names in Zoology;
- (3) place the species-group name *tridens* Hendel, 1910, as published in the trinomen *Urellia augur tridens* (type-species of *Goniurellia* Hendel, 1927), on the Official List of Specific Names in Zoology.

REFERENCES

- BEZZI, M., 1924. Further notes on the Ethiopian fruit-flies, with keys to all the known genera and species. — (cont.). *Bull. Entomol. Res.* vol. 15: 121-155.
- FRAUENFELD, G., 1856. Beiträge zur Naturgeschichte der Trypeten nebst Beschreibung einiger neuer Arten. *Sitzber. K. Akad. der Wiss. Wien, Math.-Nat. Cl.* vol. 22: 523-557.
- HARDY, D.E., 1968. The fruit fly types in the Naturhistorisches Museum, Wien (Tephritidae - Diptera). *Ann. Naturhistor. Mus. Wien.* vol. 72: 107-155.
- HENDEL, F., 1910. Über acalyptrate Musciden. *Wien. Entomol. Ztg.* vol. 29: 105-127.
- 1927. Trypetidae. In: Lindner, E. *Die Fliegen der palaearktischen Region*, Heft 49. Stuttgart. 221 pp.
- 1931. Nachtrag zu den palaearktischen Trypetiden (Neue aegyptische Arten, von Prof. Efflatoun Bey gesammelt). *Bull. Soc. Roy. Entomol. Egypt* vol. 15: 1-13.
- MUNRO, H.K., 1955. The influence of two Italian entomologists on the study of African Diptera and comments on the geographical distribution of some African Trypetidae. *Bull. Lab. Zool. Gen. Agraria Portici* vol. 33: 410-426.
- 1957. Trypetidae. In: British Museum (Nat. Hist.) *Ruwenzori Expedition* vol. 2, No. 9: 853-1054.
- STEYSKAL, G.C. and EL-BIALY, S., 1967. A list of Egyptian Diptera with a bibliography and key to families. *UAR Minist. Agr. Tech. Bull.* No. 3, 87 pp.



Freidberg, Amnon and Kugler, J. 1977. "The type-species of *Goniurellia* Hendel, 1927 (Insecta: Diptera: Tephritidae). Z.N.(S.) 2157." *The Bulletin of zoological nomenclature* 33, 208–211.

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