A NEW SPECIES OF *NEASPILOTA* (DIPTERA: TEPHRITIDAE) FROM FLORIDA

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ABSTRACT

A new species, *Neaspilota floridana,* bred from *Vernonia angustifolia* Michx. var. *scaberrima* (Nutt.) Gray, is described from Orlando, Florida. The structures of the ♀ ovipositor and ♂ genitalia and color are used to distinguish this species from its closest relative, *Neaspilota alba* (Loew), and from other known *Neaspilota.*

RESUMEN

Se describe una nueva especie, *Neaspilota floridana,* criada sobre *Vernonia augustifolia* Michx. var. *scaberrima* (Nutt.) Gray en Orlando, Florida. Las estructuras del ovipositor, la genitalia del macho y el color se distinguen esta especie de *N. alba,* la cual es la especie más próxima, y de otras especies de *Neaspilota.*

An new species of *Neaspilota* Osten Sacken is described to make a name available for work being done on fruit flies in Florida. This species was brought to my attention when Dr. Amnon Friedberg revised the subfamily Terelliinae. It had been identified as *Neaspilota alba* (Loew) by Benjamin (1934).

Neaspilota floridana Rohani, NEW SPECIES

Superficially *N. floridana* resembles *N. alba* (Loew), a more northern species, and some other Florida species because of the entirely hyaline wing and predominantly yellow pollinose body. It differs from all known *Neaspilota* by certain characters of the head, ♀ ovipositor, and ♂ genitalia (Fig. 1 A-J).

FEMALE: Predominantly yellow species. Head as in Fig. 1A. Vertex and frons yellow pollinose; the fronto-facial angle rounded; frons pubescent with whitish tomentum. Two pairs of upper fronto-orbitals, 3 pairs of lower fronto-orbitals. Face yellow, with slight concavity; epistomal margin slightly expanded. Thorax entirely yellow pollinose appearing silvery gray. Chaetotaxy typical of *Neaspilota* with dorsocentral bristles situated distinctly behind supra-alars. Legs entirely yellow to rufous, bristles as in congeners. Wing entirely hyaline except for yellowish tinge in the stigma similar to *alba.* Abdomen mainly black in ground color, usually with large bands on anterior part of terga, leaving narrow yellow posterior stripes. Pubescence on dorsum of abdomen whitish. Ovipositor sheath light yellow tinged with brown proximally and distally, about 0.8 mm long; piercer short and thick,

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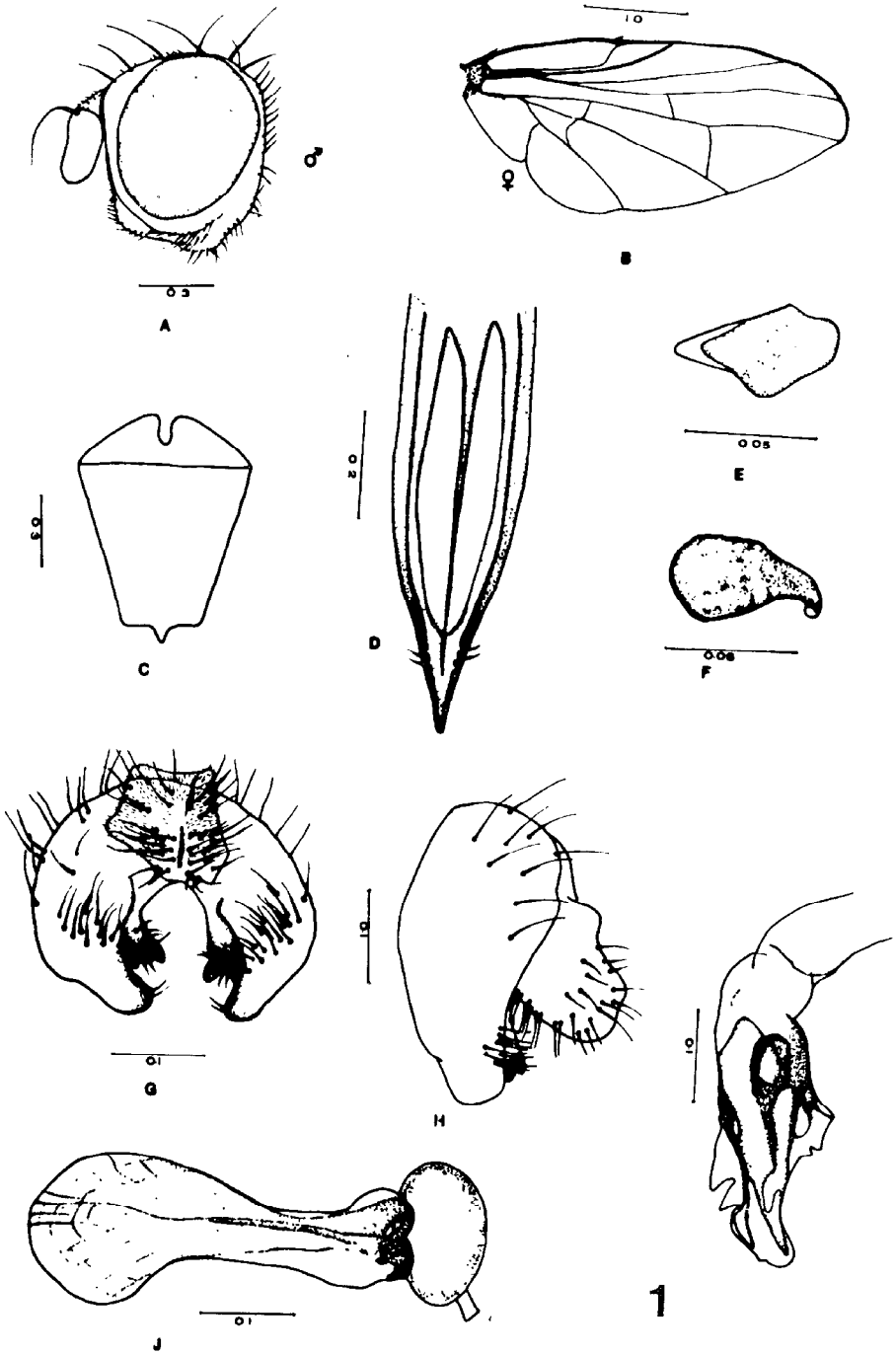

Fig. 1A-J. *Neaspilota floridana.* A. Lateral view of the head. B. Wing ♀. C. Dorsal view of ovipositor sheath. D. Dorsal view of piercer of ♀ ovipositor. E. Largest spicule of raspers. F. Spermatheca. G. Dorsal view of ♂ genitalia. H. Profile view of ♂ genitalia. I. Tip of aedeagus. J. Ejaculatory apodeme.

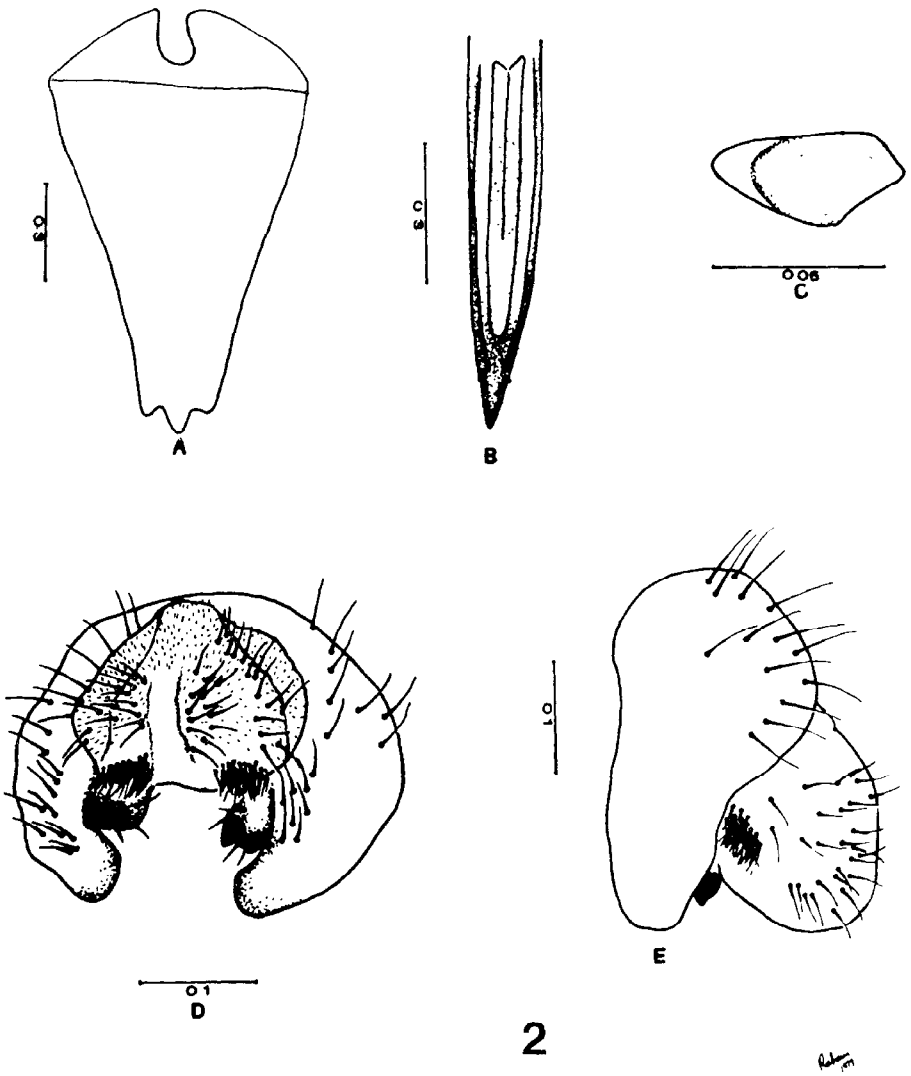

Fig. 2A-E. *Neaspilota alba* (Loew). A. Dorsal view of ovipositor sheath. B. Dorsal view of piercer of ♀ ovipositor. C. Largest spicule of raspers. D. Dorsal view of ♂ genitalia. E. Profile view of ♂ genitalia.

about 0.7 mm long, apex of piercer abruptly tapered to sharp point (Fig. 1D). Largest spicules of raspers somewhat more narrow and acute than spicules of *alba* (Fig. 1E). Spermatheca oval as in Fig. 1F. Extended ovipositor 2.3 mm long. Length: body 3.2-3.8 mm; wing 3.1-3.8 mm (n=6).

MALE: Same as ♀ except for postabdominal characters. Male genitalia as in Fig. 1H; epandrium highly arched, surstyli elongate, curved inward almost truncate at apex; proctiger with clusters of long pale setae latero-ventrally; ejaculatory apodeme fan-shaped and lightly pigmented (Fig. 1J): aedeagus as in Fig. 1I.

Holotype ♀, allotype, and 6 paratypes. Orlando, Orange County, Florida; 19-IV-1931 (holotype), 24-VI-1930 (allotype), 24-VI-1930 (1 ♀ and 2 ♂

paratypes), 21-IV-1930 (2 ♀ paratypes), and 31-IV-1930 (1 ♀ paratype). Holotype, allotype, and paratypes are reared from *Vernonia augustifolia* Michx. var. *scaberrima* (Nutt.) Gray, all collected by D. J. Nicholson. Holotype and allotype in U.S.N.M., no. 76477; paratypes in FSCA.

Neaspilota floridana is very close to *N. alba.* The differences between them lie chiefly in the length and thickness of the setae situated at the sides of the proctiger of the ♂ genitalia. The setae in *floridana* are much longer (Fig. 1G, H), paler, and less dense than in *alba;* (Fig. 2E) the remainder of the proctiger in *floridana* bears longer setae than in *alba,* which makes the setae appear less crowded. The ovipositor and ovipositor sheath of *alba,* about 2.9 mm and 1.2 mm, respectively, are much longer than those of *floridana.*

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REFERENCES CITED

BENJAMIN, F. H. 1934. Descriptions of some native trypetid flies with notes on their habits. USDA Tech. Bull. 401. 96 p.

MOLE CRICKETS AND PASTURE GRASSES: DAMAGE BY *SCAPTERISCUS VICINUS,* BUT NOT BY *S. ACLETUS* (ORTHOPTERA: GRYLLOTALPIDAE)

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ABSTRACT

Scapteriscus vicinus and *S. acletus* juveniles and adults were held in outdoor cages planted with plugs of Pensacola bahiagrass and coastal bermudagrass. Densities were 11 or 22 per m^2 of soil surface and 308 or 616 per m^2 of grass; alternative food was provided in half the cages. *S. vicinus* significantly reduced forage yield and stand of both grasses, but damage to bahiagrass was much greater than to simultaneously available bermudagrass. *Scapteriscus acletus* adults and juveniles had little if any effect on either grass.

RESUMEN

Juveniles y adultos de *Scapteriscus vicinus* y *S. acletus* se mantuvieron dentro de jaulas en las cuales se plantaron pedazos de pasto bahía, *Paspalum*