

## New records for Tephritidae (Diptera) in Great Smoky Mountains National Park

As part of the All Taxon Biological Inventory (ATBI) being conducted in the Great Smoky Mountains National Park (GSMNP), we report the following new distribution and host plant records. The authors collected and identified all specimens except as noted below. Comments regarding previous known distributions and hosts are taken from Foote *et al.* (1993).

*Eulia fratria* (Loew) - Chimney Tops picnic area, 30 May 1999, larvae collected in leaf mines of *Angelica* sp. (Apiaceae) and reared to adults. New state record for Tennessee. Widespread across the USA and southern Canada, but little collected in the Appalachian and Great Plains states.

*Eutreta rotundipennis* (Loew) - Cade's Cove, 13 July 2000. New state record for Tennessee. Previously known only from Maryland, Virginia, Pennsylvania, Kansas, and Texas. Host unknown.

*Rhynencina longirostris* Johnson - Sugarlands Park Headquarters, 5 August 1996, collector D. DeFoe; Metcalf Bottoms picnic area, and Abrams Creek campground, 12-13 July, 2000; reared from flower heads of *Smallanthus uvedalia* (L.) (Asteraceae). New state record for Tennessee, and new host plant record. Previously known only from Pennsylvania, Maryland, South Carolina and Georgia. Adults of this and other congeners previously have been collected in association with *Smallanthus*, but never before reared (Freidberg and Norrbom, 1999).

*Strauzia intermedia* (Loew) - Grotto Falls trail head, 28 May 1999, coll. E. Schlinger. New state record for Tennessee. Widespread in North America and known to breed in *Rudbeckia laciniata* (Asteraceae).

*Strauzia perfecta* (Loew) - Metcalf Bottoms picnic area, 13 July 2000. Widespread in the USA east of the Rocky Mountains, north of about 36°N latitude. Tennessee was included in the distribution map of Foote *et al.* (1993) but without a specific locality. Its host is *Ambrosia trifida* (Asteraceae).

*Strauzia uvedaliae* Stoltzfus - Metcalf Bottoms picnic area, 30 May 1999 and 12-13 July 2000; Sugarlands Park Headquarters, 30 May 1999; and Abrams Creek campground, 13 July, 2000. All specimens were taken from foliage of *Smallanthus uvedalia*; one female was observed ovipositing into a stem. New state record for Tennessee. There is some question regarding the taxonomic limits of *Strauzia longipennis* (Wiedemann), and thus its geographic and host range, and whether it may include other host-associated taxa, such as *S. uvedaliae*. The host association of the specimens captured in the GSMNP is clear and specimen morphology neatly matches that described by Stoltzfus (1988).

*Strauzia verbesinae* Steyskal - Cades Cove, and Sugarlands Park Headquarters, 30 May 1999. New state record for Tennessee. Previously known only from Virginia and Kentucky. Contrary to the comment in Foote *et al.* (1993) that this is a rare species, we found adults abundantly on *Verbesina* sp. (Asteraceae).

*Trypeta tortilis* (Coquillett) - Newfound Gap, 11-14 July, 2000, ex. malaise trap. New state record for North Carolina. *Trypeta tortilis*, including synonymized *T. angustigena* Foote, is widespread in North America, including Canada and Alaska, but previously uncollected in any of the southeastern states. It is a leafminer in several genera of Asteraceae.

*Xanthaciura tetraspina* (Phillips) - Metcalf Bottoms picnic area, 30 May 1999, on flower heads of *Smallanthus uvedalia*. New state record for Tennessee. Widespread in North America, south to Brazil. Reported hosts are species of *Ageratum* and *Eupatorium* (Asteraceae).

We thank the National Park Service, and especially Keith Langdon, inventory and monitoring coordinator for GSMNP, and Don DeFoe, curator of GRSM, for facilitating our studies in the park. Specimens were collected under permit numbers GRSM1999074 and GRSM-00-103, and all are vouchered in the Natural History Museum at Sugarlands, GSMNP and/or the Florida State Collection of Arthropods. This is Entomology Contribution No. 911, Bureau of Entomology, Nematology & Plant Pathology.

### References Cited

- Freidberg, A. and A. L. Norrbom. 1999. A generic reclassification and phylogeny of the tribe Myopitini (Tephritidae), pp. 581-637. *In* Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior. Martín Aluja and Allen L. Norrbom, editors. CRC Press, Boca Raton, FL. 944 pp.
- Foote, R. H., F. L. Blanc, and A. L. Norrbom. 1993. Handbook of the fruit flies (Diptera: Tephritidae) of America north of Mexico. Cornell Univ. Press, Ithaca NY. 571 pp.
- Stoltzfus, W. B. 1988. The taxonomy and biology of *Strauzia* (Diptera: Tephritidae). *J. Iowa Acad. Sci.* 95: 117-126.
- G. J. Steck and Bruce D. Sutton, Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, P.O. Box 147100 Gainesville, FL 32614-7100 USA.