Echinothrips

americanus Female

americanus head & pronotum

americanus antenna

americanus meso & metanota

americanus tergites VI-X

americanus tergites

americanus male sternites

americanus maxillary palps

americanus fore wing

Generic diagnosis

Female macropterous. Head strongly reticulate, slightly prolonged in front of eyes; maxillary palps 2-segmented; eyes with seven pigmented facets; ocellar setae I present; three pairs of postocular setae. Antennae 8-segmented, segment I without paired dorso-apical setae, III and IV with sense-cones usually simple, III–VI with one to three rows of microtrichia. Pronotum strongly reticulate, with three pairs of capitate posteromarginal setae. Mesonotum reticulate; median pair of setae far from posterior margin, campaniform sensilla absent. Metanotum reticulate; median pair of setae far from anterior margin. Fore wings with first vein close to costal vein, both usually with continuous row of long capitate setae, second vein without setae; clavus with two veinal and one discal setae; posterior fringe cilia wavy. Prosternal ferna slightly divided medially; basantra membranous, without setae. Mesosternum with sternopleural sutures absent; endofurca with spinula; spinasternum very narrow. Metasternum endofurca without spinula. Tarsi 2-segmented. Tergites without ctenidia or craspeda, not clearly divided from pleurotergites; tergites II–VIII with S1 setae long and close together, lateral thirds usually with numerous ciliate microtrichia on sculpture lines; tergite VIII with posteromarginal comb long, fine and complete; IX with two pairs of MD setae, campaniform sensilla absent. Sternites without discal setae; III–VII with three pairs of posteromarginal setae, II with two pairs, all setae arise in front of posterior margin.

Male similar to female; sternites III–VIII with numerous small pore plates.

Relationship data

Thripidae sub-family Thripinae: this is a diverse group involving more than 230 genera. The species of *Echinothrips* share extensive reticulate sculpture with species of Panchaetothripinae. However, the chaetotaxy of the fore wings, with no setae on the second vein, suggest a possible relationship to the Sericothripinae (Lima & Mound, 2016).

Biological data

The leaf-feeding thrips in this genus exhibit an unusual host range. One species is known to breed on a species of Pinaceae, one breeds on a species of *Selaginella*, but the others are associated with various dicotyledonous plants. The widely introduced species, *americanus*, is known particularly as a pest of cultivated *Capsicum* [Solanaceae] (Zhu *et al*., 2017).

Distribution data

The species of this genus are all from the Americas, with one species introduced widely around the world as a pest on some crops.

Nomenclatural data

Echinothrips Moulton, 1911: 37. Type species *Echinothrips mexicanus* Moulton, 1911, by monotypy.

This genus of seven species (ThripsWiki, 2018) includes one pest species that is introduced to China:

americanus Morgan, 1913: 14.

References

Lima EFB & Mound LA (2016) Systematic relationships of the Thripidae subfamily Sericothripinae (Insecta: Thysanoptera). *Zoologischer Anzeiger* **263**: 24–32.

Mound LA & Marullo R (1996) The Thrips of Central and South America: An Introduction. *Memoirs on Entomology, International* **6**: 1–488.

ThripsWiki (2018). *ThripsWiki - providing information on the World's thrips*. <**http://thrips.info/wiki/Main_Page**>

Zhu L, Wang ZH, Gong YJ, Cao LJ & Wei SJ (2017) Effect of temperature on the development of *Echinothrips americanus* Morgan (Thysanoptera: Thripidae) with special reference to the number of generations. *Journal of Asia-Pacific Entomology* **20** (4): 1197–1203.