FOUR NEW *AMEROSEIUS* BERLESE 1903 FROM THE UNITED STATES (ACARINA: AMEROSEIIDAE)

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There appears to be no record of mites of this genus occurring in the United States although two of the species are fairly common in the mountains of east Tennessee. The mites inhabit the bark of dead trees and soil litter; they probably feed on fungus hyphae.

All measurements are in microns. Leg measurements are from base of coxa to end of pretarsal claws. All drawings are of females unless otherwise indicated.

Ameroseius coronarius, new species

(Fig. 1-9)

Ameroseius coronarius is distinctive in having the combination of unusually short setae on the dorsal shield and a ring of small teeth round the vertical setae.

FEMALE: Dorsal shield 461 long, 281 wide, strongly sclerotized, with broad ridges as shown in Figure 1, left; "anterior dorsal shield" with 20, "posterior dorsal shield" with 9 pairs of setae; vertical seta 29, Z_5 57 long. The shields of ventral surface are shown in Figure 1, right; anal shield 100 long, 140 wide; striae of posterolateral interscutal area strongly lobed. Tectum not produced anteriorly, but with a row of small denticles along anterior margin (Fig. 2). Rostrum (Fig. 3) with seta C_1 19 long, coarser than the other rostral setae. Chelicerae (Fig. 4) with fixed digit 23 long. Legs stout; leg I 358, II 287, III 284, IV 377 long; tarsus I 108 (including pretarsus 130), II 90 (including pretarsus 119), III 86 (including pretarsus 115), IV 112 (including pretarsus 144) long. Chaetotaxy of femora I and IV and tarsus IV is shown in Figure 6.

MALE: Resembles female, except it bears a ventrianal shield. Dorsal shield 374 long, 266 wide; ventrianal shield 119 long, 119 wide, with anterior margin straight and with 3 pairs of preanals; the spermatodactyl is shown in Figure 5.

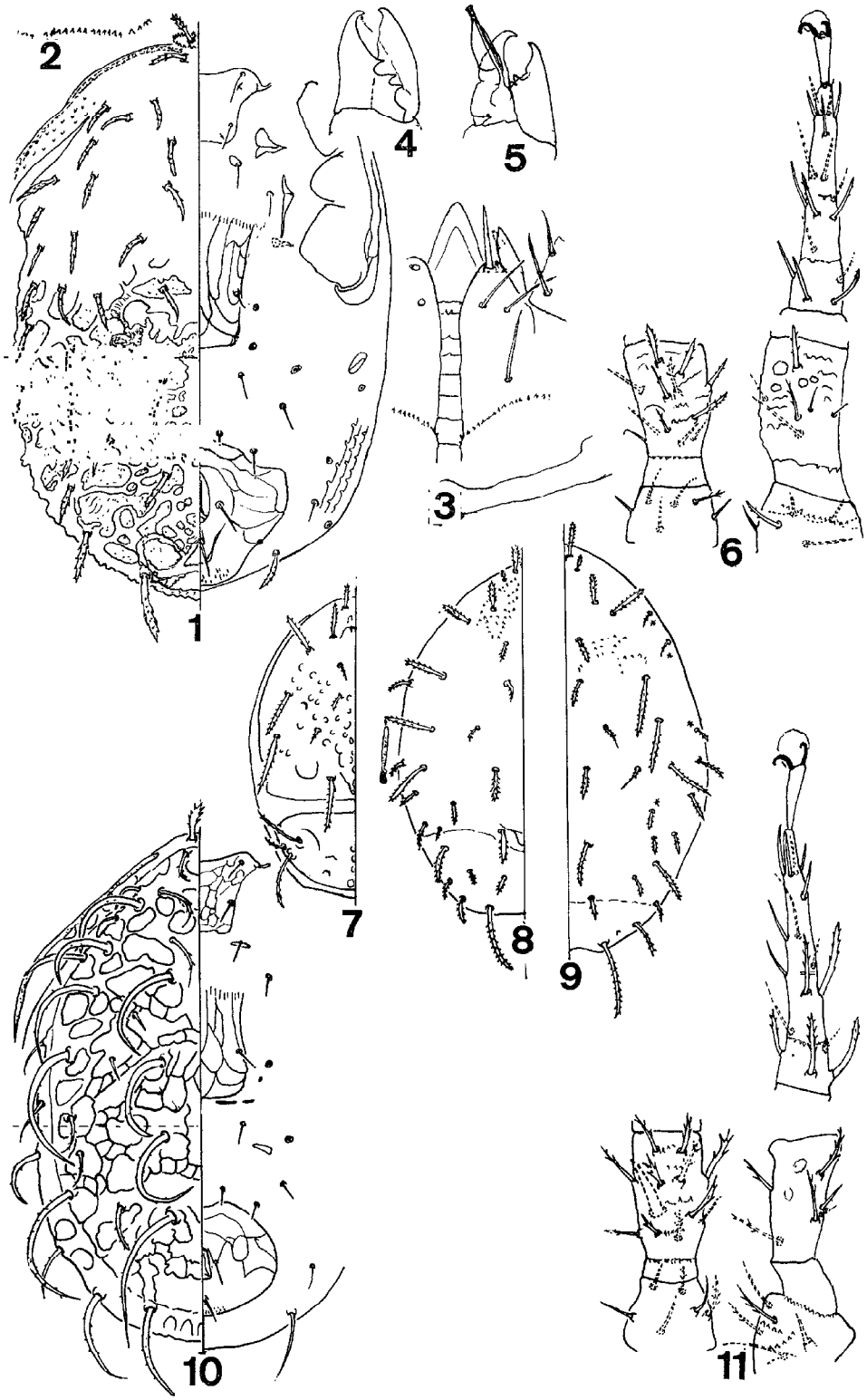
IMMATURE STAGES: The chaetotaxy of the dorsum of the larva, protonymph, and deutonymph is shown in Fig. 7, 8, and 9 respectively. The setae indicated by an asterisk in the drawing of the deutonymph are not present on some specimens.

Holotype: Female, Erwin, Tennessee, 18 Sept. 1962 (D. De Leon), on bark of dead oak limb; *paratypes*: 2 females, 1 male, 4 nymphs, 4 larvae collected with holotype; 2 females 10 Sept. 1962 on bark of *Liriodendron* log.

Ameroseius peniphorae, new species

(Fig. 10-11)

Ameroseius peniophorae is readily distinguished from other species with long setae on the dorsal shield by its having a coarse spine-like seta on the ventral surface of femur I. The male and immature stages are unknown.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FEMALE: Dorsal shield 479 long, 308 wide, strongly scleortized and with broad ridges as shown in Fig. 10, left; "anterior dorsal shield" with 18, "posterior dorsal shield" with 9 pairs of setae; vertical seta 36, I_2 137, Z_5 104 long. The principal shields of ventral surface are shown in Fig. 10, right; anal shield 108 long, 148 wide. Chelicerae not observable. Seta C_1 21 long and not noticeably coarser than the other rostral setae. Leg I 380, II 305, III 286, IV 379 long; tarsus I 117 (including pretarsus 144), II 90 (including pretarsus 121), III 90 (including pretarsus 119), IV 126 (including pretarsus 162) long. Chaetotaxy of femora I and IV and tarsus IV is shown in Fig. 11.

Holotype: Female, Erwin, Tenn., 19 Sept. 1962 (D. De Leon), on hyphae of *Peniophora gigantea* on bark of log of *Pinus strobus*.

Ameroseius mariehigginsae, new species

(Fig. 12-13)

Ameroseius mariehigginsae is distinctive in being a very large mite with moderately long setae on the dorsal shield and with an unusually large pore on the "posterior dorsal shield". The male and immature stages are unknown.

FEMALE: Dorsal shield 570 long, 365 wide, strongly sclerotized, with broad flat ridges as shown in Fig. 12, left; "anterior dorsal shield" with 20, "posterior dorsal shield" with 9 pairs of setae; vertical seta 52, Z_5 98 long. The shields of the ventral surface are shown in Fig. 12, right; anal shield 135 long, 179 wide. Chelicerae and rostrum not observable. Leg I 503, II 402, III 420, IV 525 long; tarsus I 156 (including pretarsus 182), II 126 (including pretarsus 159), III 130 (including pretarsus 161), IV 171 (including pretarsus 212) long; chaetotaxy of femora I and IV and tarsus IV is shown in Fig. 13.

Holotype: Female, White Pass, Lewis County, Washington, 19 June 1956 (M. Higgins), from duff. The mite is named for the collector, Mrs. Harold G. Higgins of Salt Lake City, Utah.

Ameroseius macropilis, new species

(Fig. 14-16)

Ameroseius macropilis resembles *A. peniophorae* in the coarseness of the setae of the dorsal shield, but the "anterior dorsal shield" has 20 pairs of setae and femur I lacks the coarse ventral spine-like seta. The immature stages are unknown.

FEMALE: Dorsal shield 430-491 long, 295-362 wide, very heavily sclerotized and with broad ridges as shown in Fig. 14, left; "posterior dorsal

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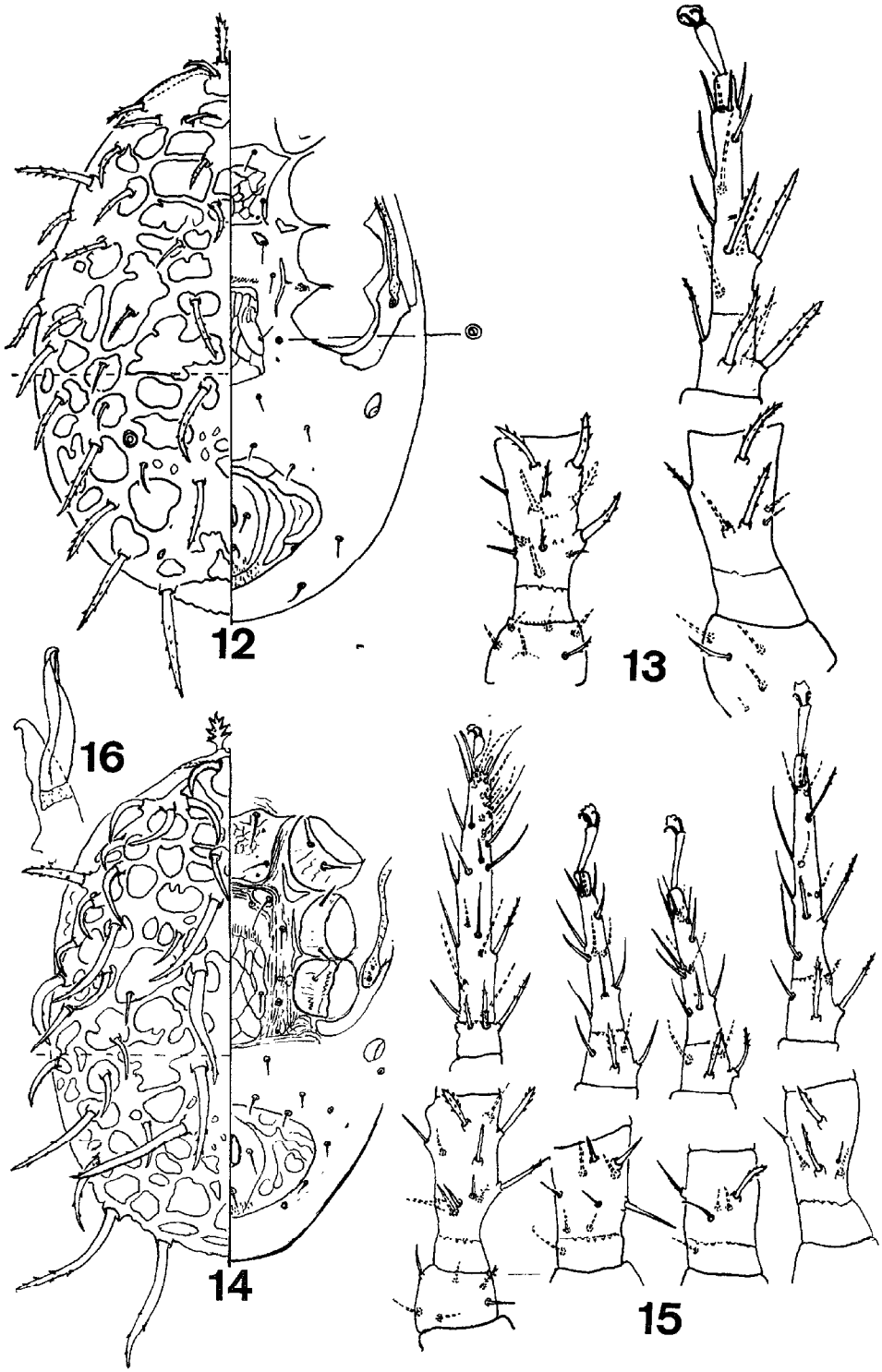
PLATE I

Figure 1-9. *Ameroseius coronarius*, n. sp. 1, dorsum (left) and venter (right); 2, anterior margin of tectum; 3, rostrum; 4, chelicerae; 5, spermatodactyl; 6, femora I and IV and tarsus IV; 7, dorsum of larva; 8, dorsum of protonymph; 9, dorsum of deutonymph.

Figure 10-11. *Ameroseius peniophorae*, n. sp. 10, dorsum (left) and venter (right); 11, femora I and IV and tarsus IV.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