

FOUR NEW *SEJUS*, A NEW *ZERCONOPSIS*, AND A NEW
HYATTELLA FROM THE UNITED STATES
(ACARINA: BLATTISOCIDAE)¹

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Mites of the genera *Sejus* C. L. Koch, *Zerconopsis* Hull, and *Hyattella* Krantz inhabit litter and fallen logs of forest and orchard soils and appear to be rather uncommon in the United States, only one species, *S. laelaptoides* (Berlese), having been recorded (Evans and Hyatt 1960).

All measurements are in microns. Leg measurements are from the base of the coxa to the base of the pretarsus; pretarsal lengths include the claws. For the terms "anterior dorsal shield" and "posterior dorsal shield" of Evans and Hyatt, ADS and PDS are used. All drawings are of females.

Sejus tennesseensis, new species
(Fig. 1-5)

Sejus tennesseensis traces to *S. spinipes* Evans and Hyatt in their key (1960) and resembles this species closely in having 21 pairs of setae on the ADS and a rather short post-spiracular peritreme; it differs in having I_5 short, in the shape of the ventrianal shield, and in having 4 pairs of inter-scutal setae lateral of the dorsal shield. The male is unknown.

FEMALE: Dorsal shield 405 long, 228 wide and almost completely covered with a network of narrow ridges; the pattern of ridges and arrangement of setae and pores is shown in Fig. 1, left. Seta i_1 coarse, 25-30 long, i_2 35 long; I_1 35, I_2 42, I_3 40, I_4 40, I_5 17 long. The ventral shields are shown in Fig. 1, right; ventrianal shield 112-130 long, 150-181 wide. Tectum (Fig. 2) and chelicerae (Fig. 3) normal. Leg I 307-340 with tarsus 100 (including pretarsus 109), tibia 53, and genu 47 long; tarsus IV 105 (including pretarsus 127) long. The chaetotaxy of leg I and femora and tarsi II-IV is shown in Fig. 4 and 5.

Holotype: Female, Erwin, Tenn., 2 Oct. 1961 (D. De Leon), from cut-over land litter; *paratypes*: 2 females, Erwin, Tenn., 2 Oct. 1962, under bark of *Liriodendron tulipifera*; 1 female in rotten log of *Robinia pseudo-acacia*, Erwin, Tenn., 19 Nov. 1962. Type and paratypes in the author's collection.

Sejus floridianus, new species
(Fig. 6-8)

Sejus floridianus traces to *S. serratus* Halbert in the key to species by Evans and Hyatt, but differs from that species in having 14 pairs of short setae on the ADS, in lacking seta r_1 , and in having the post-spiracular peritreme more strongly hooked.

FEMALE: Dorsal shield 447 long, 248 wide and almost entirely covered with a network of slight ridges, the area enclosed by these ridges appears

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to be slightly wrinkled and in places broken up into minute projections; anterolateral margins without reticulations, but with small projections; ridges in area near setae I_3 jagged; arrangement of setae and pores is shown in Fig. 6, left; seta I_1 16, I_2 24, I_3 24, I_4 23 long; the setae indicated with an asterisk in Fig. 6, left not present on both sides. Shields of ventral surface (Fig. 6, right) normal except genital shield without setae and metasternal shields and setae missing; ventrianal shield 99 long, 110 wide. Tectum (Fig. 7) normal; dentition of chelicerae not observable. Leg I 559, with tarsus (excluding pretarsus) 101, tibia 123, and genu 94 long; pretarsus small and with small claws.

Holotype: Female, Avon Park, Fla., 18 Aug. 1960 (M. H. Muma), from litter under citrus tree; in Citrus Experiment Station Collection, Lake Alfred, Fla.

Sejus greenae, new species
(Fig. 9-11)

Sejus greenae resembles *S. phalangoides* Evans and Hyatt in having unusually long legs IV, but differs from that species in having legs IV somewhat shorter, 22 pairs of setae on the ADS, and in other characters. The male is unknown.

FEMALE: Dorsal shield 390 long, 228 wide, practically smooth; arrangement of setae and pores is shown in Fig. 9, left. Seta I_1 44, I_2 43, I_3 49, I_4 49 long. Shields of ventral surface (Fig. 9, right) normal; ventrianal shield 101 long, 130 wide. Tectum and dentition of chelicerae not observable. Legs slender; tarsus I 108 (including pretarsus 119), tibia I 94, genu I 63, femur I 90 long; tarsus IV 219 (including pretarsus 244), tibia IV 85, genu IV 70, femur IV 124 long; proximal metatarsal seta of tarsus IV 24 long; basal portions of tarsi II and III are shown in Fig. 10, and the last 3 segments of leg IV are shown in Fig. 11.

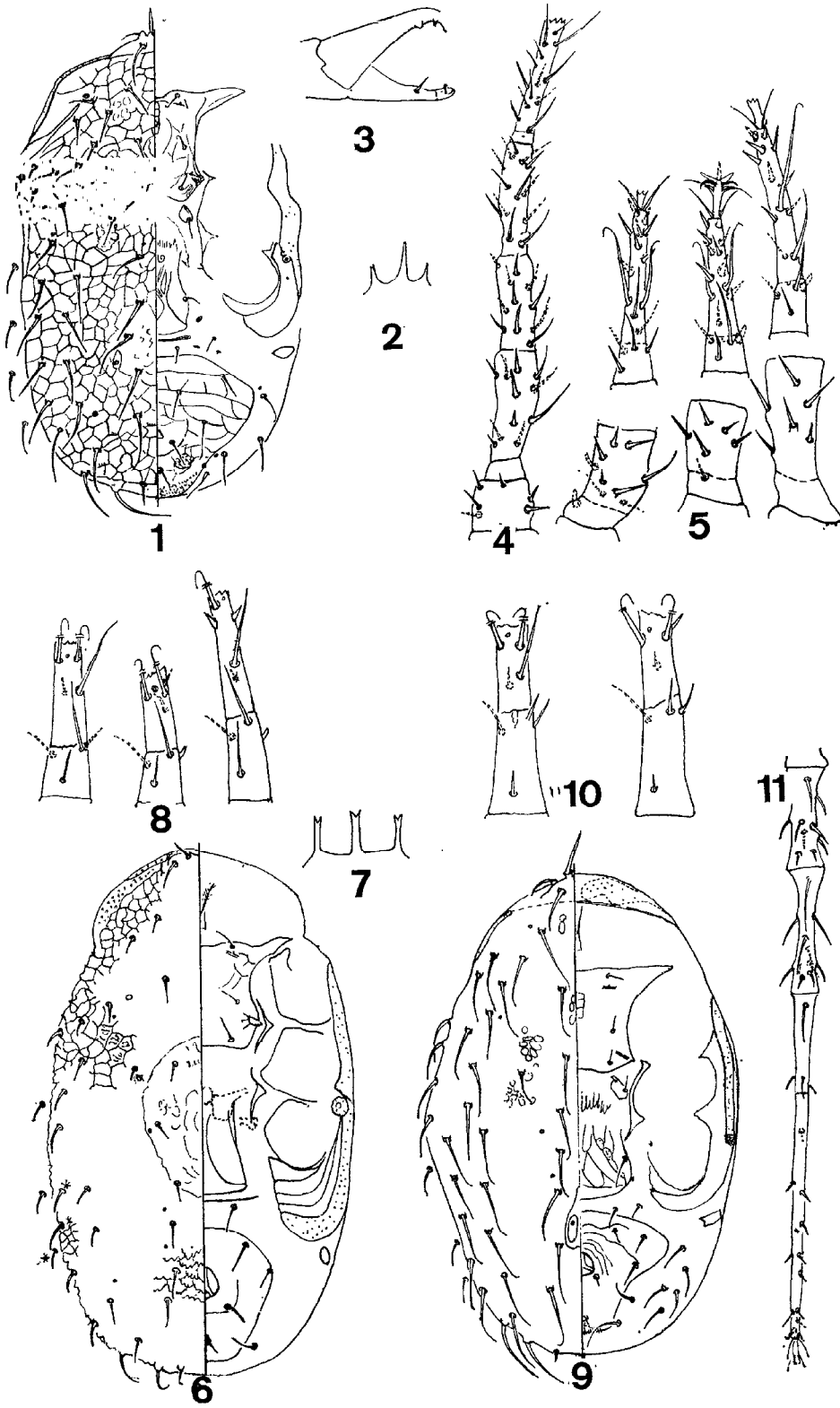
Holotype: Female, 7 miles south of Lake Placid, Fla., 12 Dec. 1962 (M. H. Muma), from litter under *Pinus clausa*; in Citrus Experiment Station Collection, Lake Alfred, Fla. The mite is named for Mrs. Helen Louise Greene, Laboratory Technician, Citrus Experiment Station, a collector of many interesting species of mites.

Sejus cascadiensis, new species
(Fig. 12-13)

Sejus cascadiensis resembles *S. necorniger* (Oud.) rather closely. It differs from that species chiefly in not having the dorsal shield completely covered with a fine reticulated pattern and in having the interscutal setae arranged much differently. The male is unknown.

PLATE I

- Fig. 1-5. *Sejus tennesseensis*, n. sp. 1, dorsal and ventral shields; 2, tectum; 3, chelicerae; 4, leg I; 5, femora II-IV and tarsi II-IV.
Fig. 6-8. *Sejus floridanus*, n. sp. 6, dorsal and ventral shields; 7, tectum; 8, proximal parts of tarsi II-IV.
Fig. 9-11. *Sejus greenae*, n. sp. 9, dorsal and ventral shields; 10, proximal parts of tarsi II-III; 11, genu, tibia, and tarsus of leg IV.



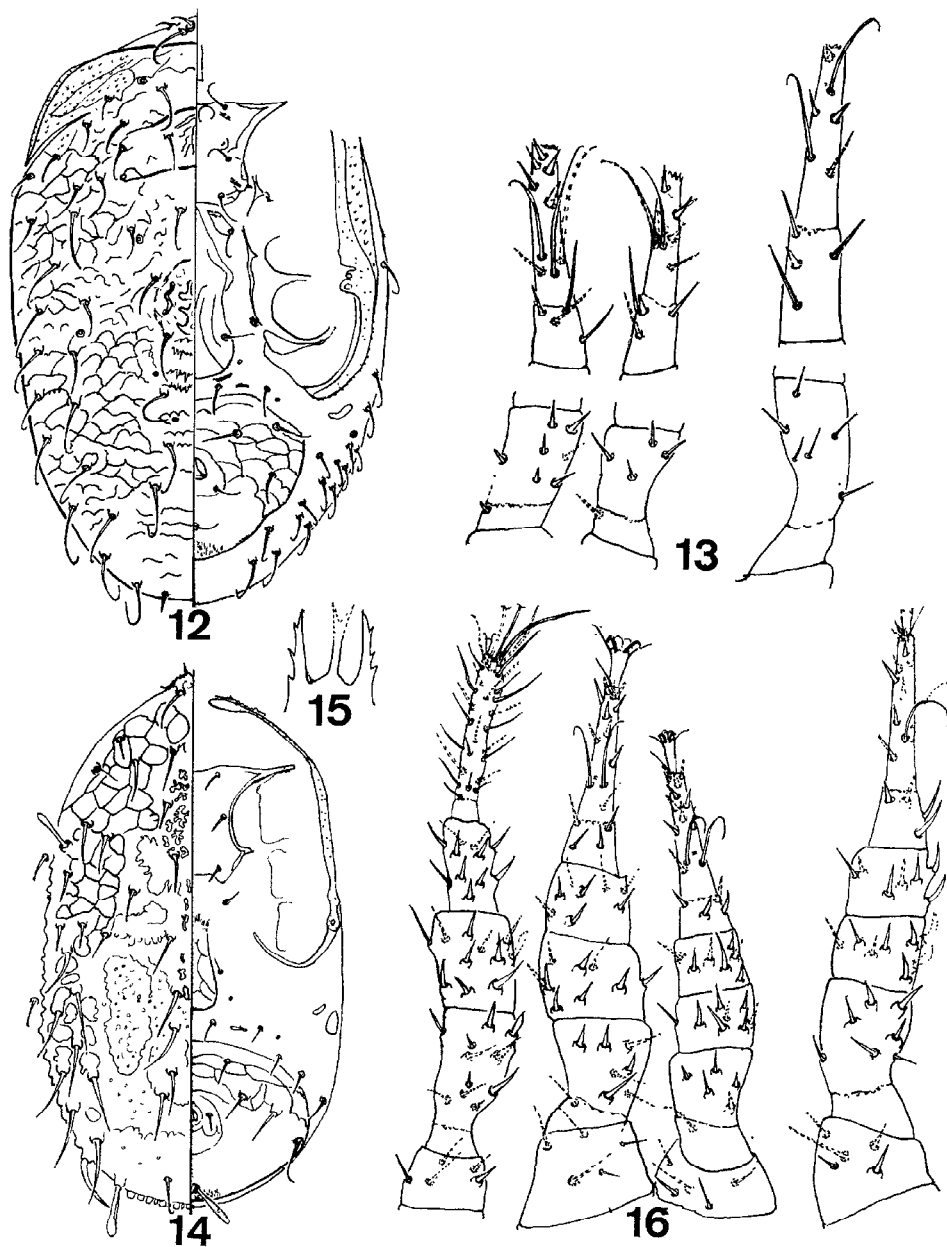


PLATE II

- Fig. 12-13. *Sejus cascadensis*, n. sp. 12, dorsal and ventral shields;
13, femora II-IV and proximal parts of tarsi II-IV.
Fig. 14-16. *Zerconopsis unaka*, n. sp. 14, dorsal and ventral shields;
15, tectum; 16, legs I-IV.

FEMALE: Dorsal shield 606 long, 380 wide, strongly sclerotized, with a reticulated pattern confined to sides and area lateral of setae I₁₋₄; mid-dorsal area of ADS with an irregular pattern of small, broken ridges; ADS with 21, PDS with 15 pairs of simple setae arranged as in Fig. 12, left. Shields of ventral surface (Fig. 12, right) normal; ventrianal shield 181 long, 235 wide. Tectum and dentition of chelicerae not seen. Leg I 605 with tarsus 145 (including pretarsus 163) and tibia 107 long; leg IV with tarsus 219 (including pretarsus 257), tibia 94, and genu 90 long; chaetotaxy of femora II-IV and basal portions of tarsi II-IV is shown in Fig. 13.

Holotype: Female, White Pass, (elevation 4500 ft.), Lewis Co., Washington, June 19, 1956 (Marie Higgins), from duff; in the author's collection.

Zerconopsis unaka, new species
(Fig. 14-16)

Zerconopsis unaka resembles *Z. michaeli* Evans and Hyatt, but is considerably smaller, the dorsal shield bears only 2 pairs of paddle-like setae, and there are 5 pairs of S setae. The male is unknown.

FEMALE: Dorsal shield 380 long, 215 wide; ADS with 18, PDS with 15 pairs of setae; markings of dorsal shield and arrangement of setae is shown in Fig. 14, left; seta I₁ 29, I₂ 36, I₃ 29, I₄ 35, I₅ 27; Z₅ 36 long. Ventral shields (Fig. 14, right) normal; ventrianal shield 112 long, 157 wide, the postanal seta paddle-shaped. Tectum (Fig. 15) typical; dentition of chelicerae not observable. Legs stout with tibiae and genua II-IV wider than long (Fig. 16); leg I 262 with tarsus 63 (including pretarsus 74), tibia 36, and genua 40 long; leg II 238, III 204, and IV 236 long; tarsus IV 87 (including pretarsus 107), tibia 28, and genu 31 long.

Holotype: Female, Erwin, Tenn., 2 Oct. 1962 (D. De Leon), from under bark of log of *Liriodendron tulipifera*; in the author's collection.

Hyattella americanella, new species
(Fig. 17-20)

Hyattella americanella resembles *H. epicrioides* Krantz differing most noticeably from that species in the relative lengths of setae of the dorsal shield and in the number of interscutal setae. The genus is intermediate between the Blattisocinae and the Platyseinae in that the characters of the setae of the dorsal shield, the rostral setae, peritrematal shield, chelicerae, and pulvilli resemble those of *Lasioseius*, while tarsus II has a pair of long setae similar to genera in the Platyseinae. The male is unknown.

FEMALE: Dorsal shield 620 long, 411 wide, the ADS with 22, the PDS with 15 pairs of setae arranged as shown in Fig. 17, left. Seta i₁ 49, I₁₋₃ 42, I₄ 45, Z₅ 85, S₅ 71 long. Reticulations of most of the ADS formed by rows of small projections. Ventral shields (Fig. 17, right) reticulated; ventrianal shield 217 long, 259 wide. Tectum (Fig. 18) apparently 3-lobed. Fixed digit of chelicerae 63 long with 17 closely set, rounded teeth, movable digit with 3 large teeth (Fig. 19). Rostral groove 14 wide, rows Q₂ and Q₃ each with about 11 denticles (other rows not observable). Legs very slender (Fig. 20); leg I 770 with tarsus 253 (including pretarsus 286), tibia 119, and genu 117 long; leg II 510, III 489, IV 741 long; tarsus IV 244 (including pretarsus 280), tibia 103, and genu 99 long. Lobes of pulvilli rounded.

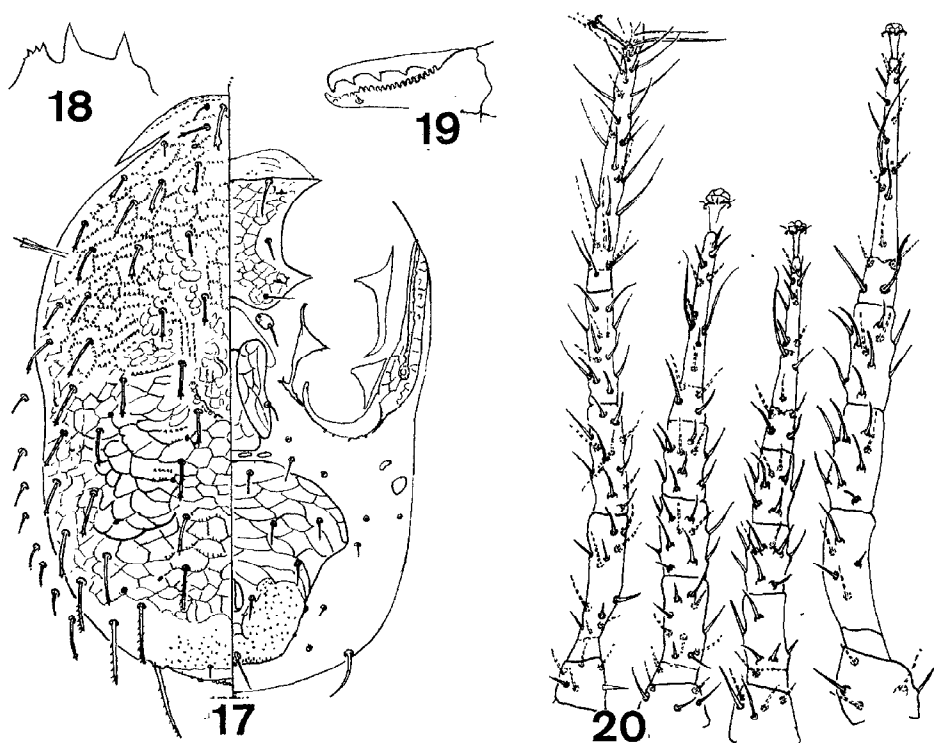


PLATE III

Fig. 17-20. *Hyattella americanella*, n. sp. 17, dorsal and ventral shields; 18, tectum; 19, chelicerae; 20, legs I-IV.

Holotype: Female, Erwin, Tenn., 11 Sept. 1961 (D. De Leon), from duff; in the author's collection.

NEW DISTRIBUTION RECORD

Sejus jamaicensis Evans and Hyatt. 1 male and 1 female, Knights, Florida, 1 Oct. 1962 from litter under citrus grove; 2 females Cleveland, Fla. 17 Oct. 1962 (M. H. Muma), from citrus litter.

ACKNOWLEDGEMENTS

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LITERATURE CITED

Evans, G. O., and K. H. Hyatt. 1960. A review of the Platyseiinae (Mesostigmata: Aceosejidae) based on material in the collections of the British Museum (Natural History). Bull. Brit. Mus. (Nat. Hist.) Zool. 6(2): 1-101.