

A new genus and species of Epicriidae (Acari, Mesostigmata) from eastern North America

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Abstract—A new genus, *Adenoepicrius* **gen. nov.**, is described, with *Adenoepicrius magnus* **sp. nov.** from Canada designated as type. Also described are *A. oconnori* **sp. nov.** (New York, Ontario), *A. curtipilus* **sp. nov.** (Virginia), and *A. virginianus* **sp. nov.** (West Virginia). A key to species based on adult females is provided.

Résumé—Un nouveau genre, *Adenoepicrius* **gen. nov.**, est décrit, avec *Adenoepicrius magnus* **sp. nov.** du Canada désigné comme modèle-type. *Adenoepicrius oconnori* **sp. nov.** (New York, l'Ontario), *A. curtipilus* **sp. nov.** (la Virginie) et *A. virginianus* **sp. nov.** (la Virginie-Occidentale) sont également décrits. Un tableau de classification des espèces, basé sur les femelles adultes, est fourni.

Introduction

Evans (1955) was the first to revise the family Epicriidae Berlese, 1885 and he recognized two genera, *Berlesiana* Türk, 1943 and *Epicrius* Canestrini et Fanzago, 1877 (the genera *Diepicrius* Berlese, 1916, *Epicriella* Willmann, 1953, and *Cornubia* Türk, 1943 were relegated to synonymy). Athias-Henriot (1961) described a group of new species from Spain and retained the genus *Berlesiana*. Bregetova (1977) synonymized *Berlesiana* with *Epicrius* based on the discovery of several species with characteristics of both genera. Recently, Moraza and Johnston (2004) described the new genus *Neoepicrius* from North America, adding new data to the body of knowledge on this group of mites whose phylogenetic relationship with other groups remains to be fully clarified.

Characteristics of the sternal and genital shields, the dorsal adenotaxy, and the chaetome of tarsus I lead us to consider *Berlesiana* as a valid Palearctic genus. Based on these characters, a new genus, apparently confined to eastern United States and Canada, is described.

Material and methods

The specimens examined belong to the following collections:

FMNH	Division of Insects, Field Museum of Natural History, Chicago, Illinois, United States of America
MZUNA	Museo de Zoología, Universidad de Navarra, Pamplona, Spain
OSAL	Ohio State University Acarology Laboratory, Columbus, Ohio, United States of America
UMMZ	Museum of Zoology, University of Michigan, Ann Arbor, Michigan, United States of America

Specimens examined using light microscopy were cleared in Nesbitt's solution and mounted in Hoyer's medium. Drawings are based on slide-mounted material.

In the generic diagnosis, uniquely apomorphic characters are indicated with an asterisk. Idiosomal setal notation follows Lindquist and Evans (1965), with modifications for the caudal region as given by Lindquist (1994) and Lindquist and Moraza (1999). The system of abbreviations for designating dermal glands and lyrifissures is based on Johnston and Moraza (1991) and Krantz and Redmond (1987). The system used to describe the chaetotaxy of tarsus I is based on Evans (1963). All measurements are given in micrometres (µm).

Adenoepicrius **gen. nov.**

Type species: *Adenoepicrius magnus* **sp. nov.**

Etymology

The name for this genus derives from the word "adeno", meaning glandular organ, and

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“epicrius”, the name given by Berlese (1892) to the type genus of the family. The name refers to the large number of dorsal glands possessed by these mites.

Diagnosis

Chelicera with an antiaxial hyaline apophysis; fixed digit with one small paraxial tooth basal to a rounded dentate process; pilus dentilis reduced to a conspicuous insertion; movable digit with one tooth. Tectum dentate (Fig. 1). Subcapitulum with hypostomal setae 1 and capitular setae long and barbed. Deutosternum with two rows of denticles. Hypostomal processes large and triangular, hypostomal lacinia trifid, very spiny (Fig. 2). Palp chaetotaxy of the trochanter–femur–genu–tibia–tarsus, 2–5–6–14–14 (Figs. 26, 27); palp claw 3-tined; epilabrum poorly developed. Dorsal shield extended laterally and ventrally to fuse with peritremal and exopodal elements (Figs. 6, 7, 17, 21), ornamented with bifurcate and trifurcate tubercles forming a polygonal network and with ventrolateral extension to capture six pairs of ventral *Jv* and *Zv* setae; 31 pairs of barbed dorsal setae (*j1–j6*, *z4–z6*, *s1–s6*, *r3–r5*, *J2–J5*, *Z2–Z4*, *S3–S5*, *R1–R4*). Podonotum with a maximum of 13 pairs of glands: seven pairs of simple glands (glands with single gland openings) (*gdj2*, *gdj2x**, *gdj4*, *gdj6*, *gdz4*, *gds5*, *gds4*); glandular complex *gds6* (Figs. 4, 18, 22) (with one gland opening and two non-glandular ports); *gdz6* (simple gland (Figs. 3, 22) or glandular complex (Fig. 18)); and five pairs of glandular complexes (*gdj1*, *gdj3*, *gds2*, *gdz5** (= *gdz4x?*)) (one gland opening and one non-glandular port); with sclerotized ring around the gland or glandular complex opening. Podonotum with eight pairs of lyrifissures (four on lateropeltidial region). Opisthonotum (Figs. 3, 16, 20, 25) with six* pairs of simple glands (*gdJ2*, *gdJ4*, *gdJ5* (= *gdJ4x?*), *gdZ2*, *gdS4*, *gdS5*) and five pairs of lyrifissures. Simple peritrematal glands *gp1* on soft cuticle and complex *gp3* on lateropeltidial region. Tritosternum with laciniae trifid, with the medial branch twice as long as and thinner than the lateral ones. Sternal setae (Figs. 6, 17, 21): *st1* on jugulars; *st2* and *st3* on sternal shield; *st4* on metasternal shields; *iv1–iv3* and *gv1* absent. Female genital shield with parallel sides, not expanded behind coxae IV; anterior portion of the epigynal region dentate; genital setae *st5* (= *g*), *Zv1*, and *iv5* on shield. Endopodal shields small

and free; males with sternigenital shield fused with endopodals III (Fig. 7). Females with ventrianal shield free or partially fused posteriorly to dorsal shield; males with anal shield completely fused to dorsal and ventral shields. Male sternigenital shield normal for the family (Fig. 7). Gland *gv2* simple, *gv3* absent, *ivp* off anal shield. Opisthogaster with nine pairs of setae and three pairs of lyrifissures. Tarsus I with two pointed apical protrusions (vestigial ambulacra?) (Fig. 12) or protrusions absent (Fig. 11), anteroventral spinelike seta (Fig. 14), 47 setae (5 anterolateral, 29 dorsal, 8 ventral, and 5 posterolateral) (Figs. 10, 11), including four macrosetae with spiny clubbed tips (*av3*, *av4*, *pv4**, *al4*) (Fig. 10). Tibia I *av1* macroseta with spiny tip or simple (Fig. 8). Setation of trochanters of legs, 6–5–5–5, respectively; that of femur, 13–13–8–8; that of genu, 2 3/2 3/1 2 (13), 2 3/1 2/1 2 (11), 2 2/1 2/1 2 (10), 2 2/1 3/1 1 (10); that of tibia, 2 3/2 3/2 2 (14), 2 2/1 2/1 2 (10), 2 1/1 2/1 2 (9), 2 1/1 3/1 2 (10). Pretarsi II–IV with well-developed claws and pulvilli; one subapical dorsal gland, two dorsal glands associated with posterodorsal lyrifissure, mediodorsal lyrifissure incorporated into circumpodal fissure so that together they circumscribe a dorsal platelet bearing setae *ad3* and *pd3* (Fig. 13); one ventral circumpodal and one dorso-basitarsal lyrifissure. Coxa I of adult with four anterolateral and eight posteroventral glands (Fig. 5), and deutonymph with seven anterolateral glands.

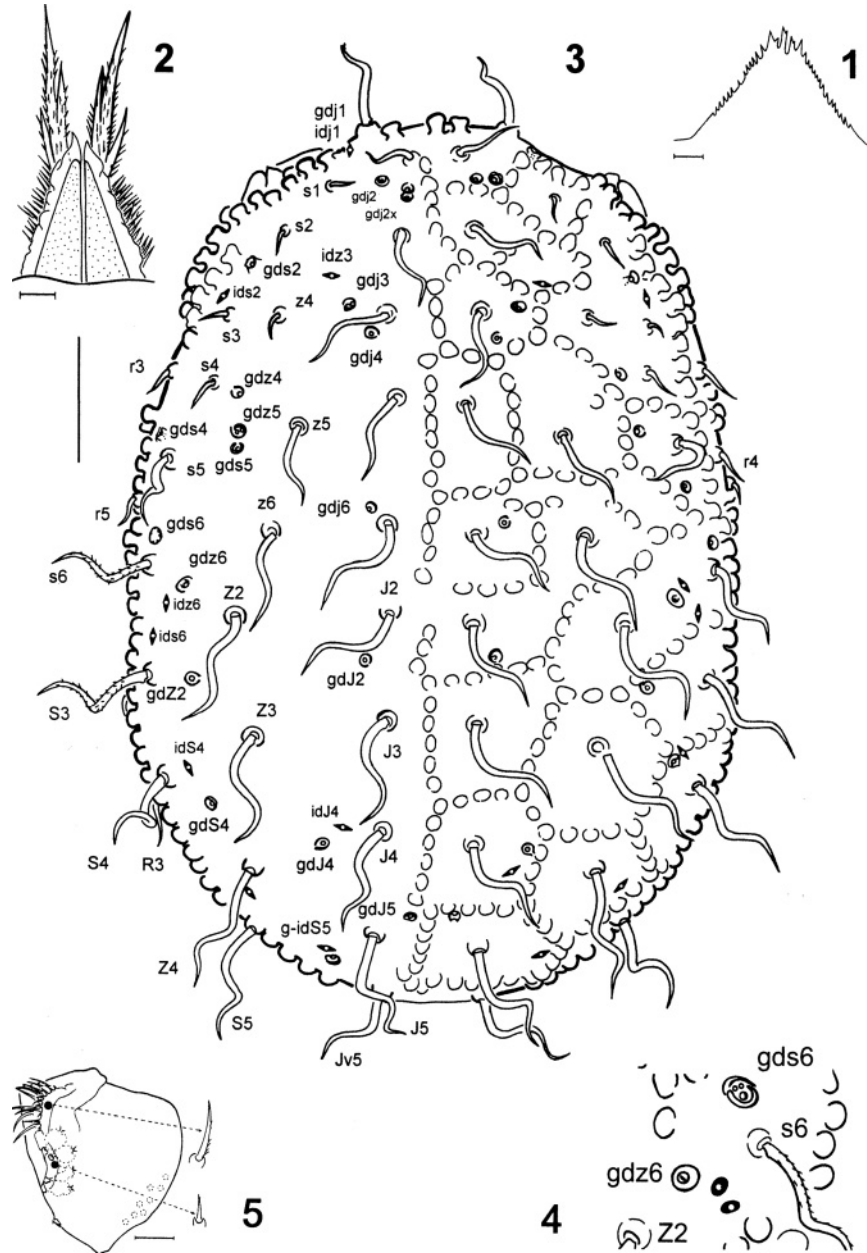
Adenoepicrius magnus sp. nov.

(Figs. 1–13)

Type material

Holotype: female. **CANADA. Ontario:** Alfred, from moose droppings in sphagnum bog, 10.v.1981, S. Peck coll., FMNH Coll. No. 81–549. **Paratypes. CANADA. Quebec:** 1 female, Gatineau Park, Meach Lake, from maple leaf litter in stream, 24.xi.1981, L.E. Watrous coll., FMNH No. 81–506. **Ontario:** 1 female, 1 male, Muskoka District, Hunsville, Arrowhead Provincial Park, from moss and litter at seepage area, 19.ix.1974, I.M. Smith coll. (5740117); 2 females, 1 male, Maxville, from logged forest, 2.x.1968, U. Gerson coll. **UNITED STATES. New York:** 1 female, 1 deutonymph, Hamilton Co., Speculator, from beech–maple litter, 9.vi.1975, B.M. OConnor coll. (BMOC No. 25–

Figs. 1–5. *Adenoepicrius magnus*. 1, Female, tectum, dorsal; 2, female, hypostomal laciniae; 3, female, idiosoma, dorsal; 4, female, glandular complex *gds6* and simple gland *gdz6*; 5, female, coxa I, right side, dorsal. Scale bars = 10 μm (Figs. 1, 2), 100 μm (Fig. 3), and 25 μm (Fig. 5).



0609–9), UMMZ. Holotype deposited in FMNH, paratypes in OSAL and MZUNA.

Etymology

The new species' name, *magnus*, refers to its large size.

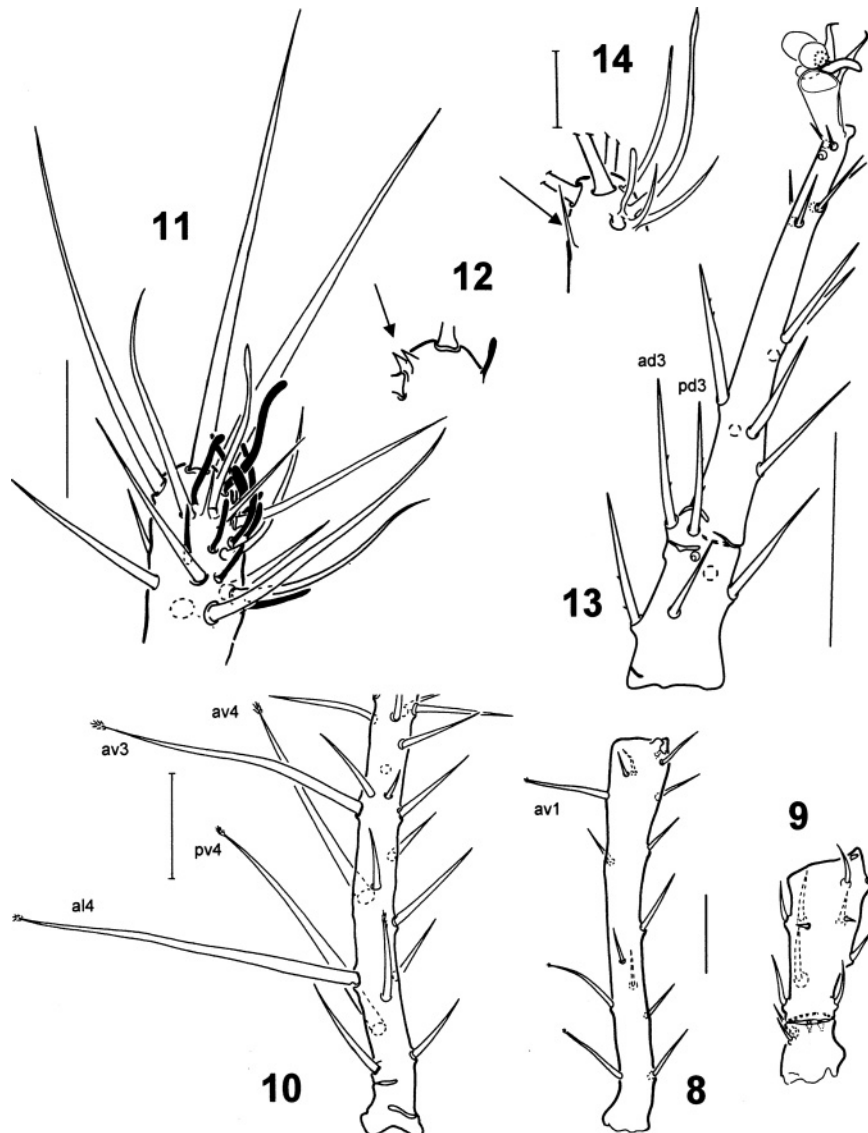
Description

Adult female (based on two specimens)

Idiosoma. Length: 713 (mean), 683–743 (range); width: 492 (mean), 487–497 (range).

Gnathosoma. Tectum, chelicerae, palps, and

Figs. 8–14. *Adenoepicrius magnus*: 8, female, tibia I, right side, anterolateral view; 9, female, femur II, right side, anterolateral view; 10, tarsus I, right leg, anterolateral view; 11, tarsus I, right leg, anterolateral view, distal detail; 12, tarsus I, apical projections, anterolateral view; 13, tarsus IV, female, left leg, anterolateral view. *Adenoepicrius curtipilus*: 14, tarsus I, female, distal region, anterolateral view, anteroventral spinelike seta. Scale bars = 50 μm (Figs. 8–12), 100 μm (Fig. 13), and 25 μm (Fig. 14).



(Fig. 7). Setae *st1* on jugulars. Sternogenital shield wide, with anterior margin bilobate, fused to endopodals II and III; genital opening between coxae III, with two valves and one pair of eugenital setae on the anterior valve. Seta *Zv1* on soft cuticle, anal shield completely fused to dorsal and ventral shields, extra opistogastric setae may be present. Glands *gv2* and *gv3* simple.

Legs. Similar to those of female.

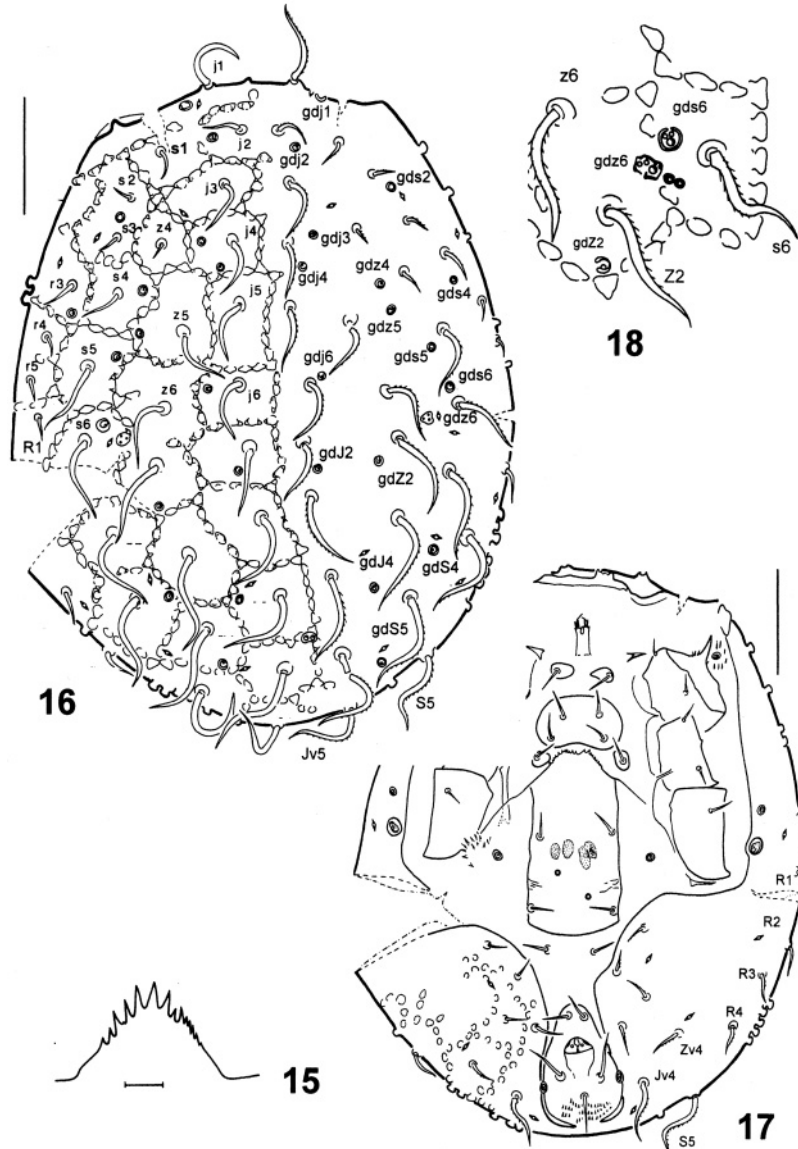
***Adenoepicrius oconnori* sp. nov.**

(Figs. 15–18)

Type material

Holotype: female. UNITED STATES. New York: Schuyler Co., Arnot Forest, from nest

Figs. 15–18. *Adenoepicrius oconnori*. 15, Female, tectum, dorsal; 16, female, idiosoma, dorsal; 17, female, idiosoma, ventral; 18, female, glandular complexes *gds6* and *gdz6* and simple gland *gdZ2*. Scale bars = 10 μ m (Fig. 15) and 100 μ m (Figs. 16, 17).



of *Sorex* sp., under log, 25.vii.1976, B.M. OConnor coll. (BMOc No. 76-0725-3), UMMZ. **Paratype:** female. **CANADA. Ontario:** Ancaster, from beech litter, 23.iv.1962, J. Martin coll. Holotype to UMMZ and paratype to OSAL.

Etymology

The new species name, *oconnoris*, refers to Dr. Barry M. OConnor.

Description

Adult female (based on two specimens)

Idiosoma. Length: 536; width: 400. **Gnathosoma.** Chelicerae, palps, and subcapitulum normal for the genus. Tectum triangular and dentate (Fig. 15).

Dorsum (Fig. 16). Dorsal shield ornamented with bifurcate and trifurcate tubercles. Dorsal setae stout and finely barbed: nine pairs of short podonotal setae on the lateral regions (*j2*, *s1*,

s2, s3, s4, z4, r3–r5) and four pairs of short opisthonotals (*R1–R4*); setae *j2* in the same reticule; *s2* and *s3* in the same reticule. Dorsal adenotaxy and poroidotaxy as in Figure 16: *gdj2x* may be present; complexes *gdj1, gdj3, gdz5, and gp3*; glandular complexes *gds6* and *gdz6* present (one gland opening and two non-glandular ports) (Fig. 18), but they do not develop a conspicuous inflamed pustule. Glands *gdz4* and *s4* in the same reticule; *gds4* with *r3* and *ip2*; *gds6, gdz6, s6, z6, and Z2* in the same reticule. **Venter** (Fig. 17). Sternal region normal; sternal shield with posterior margin concave (length/width ratio = 0.6); genital shield relatively narrow with parallel borders and bearing genital setae *Zv1* and *iv5*; gland *gv2* simple. Opisthogaster with nine pairs of setae, six on the sclerotized opisthogastric shield fused to dorsal shield; ventrianal shield partially fused behind to dorsal shield, with one pair of preanal setae; *Jv1* on the soft interscutal cuticle.

Legs. Chaetotaxy, adenotaxy, and poroidotaxy normal for the genus. Tarsus I with apical protrusions and four ventral macrosetae with a spiny tip; tibia I with *av1* distally spiny. Length: tarsus I, 210; tarsus II, 203; tarsus III, 174; tarsus IV, 232; tibia I, 223; genu I, 116; and femur I, 255. Coxa I normal for the genus. Ratio of body length / tibia I length = 2.4.

Adult male

Unknown.

***Adenoepicrius curtipilus* sp. nov.**

(Figs. 14, 19–22)

Type material

Holotype: female. **Paratype:** female. **UNITED STATES. Virginia:** Mountain Lake Sa., from rhododendron bald, 2.ix.1967, J.M. Campbell coll. Holotype at OSAL and paratype at MZUNA.

Etymology

The species' name, *curtipilus*, refers to its short podonotal setae.

Description

Adult female (based on two specimens)

Idiosoma. Length: 601 (mean), 569–631 (range); width: 450. **Gnathosoma.** Chelicerae, palps, and subcapitulum normal for the genus. Tectum dentate (Fig. 19).

Dorsum (Fig. 20). Dorsal shield ornate with bifurcate and trifurcate tubercles. Dorsal setae densely barbed: except for *j1* and *j6*, podonotal setae do not reach the bases of setae next behind; eight pairs of shorter podonotal setae at anterolateral position (*s1, z4, s2–s4, r3–r5*), $z4 < s4, r4 < r5$; opisthonotal setae stout and, except for R setae, longer than most podonotal setae. Setae *s2, s3, z4, and s4* in the same reticule; *r4* and *r5* in the same reticule. Dorsal adenotaxy and poroidotaxy as in Figure 20: complexes *gdj1, gdj3, gdz5, gds2, gp3, and gds6* simple, paraxial to glandular complex *s6* (Fig. 22), with an incomplete ring and sharing reticule with *s6, gds6, ids6, and idz6*. Gland *gdZ2* in the same reticule as *S3*. **Venter** (Fig. 21). Sternal and epigynal shields normal for the genus; sternal shield with bilobate anterior and posterior margins (length/width ratio = 0.4); genital shield with parallel borders, slightly expanded behind setae *Zv1*; endopodals present and free; opisthogaster with nine pairs of setae: *Zv1* on genital shield, *Jv2* on anal shield, *Jv1* on soft interscutal cuticle, and other opisthogastric setae on ventral sclerotized cuticle. Anal shield with anterior slit, fused to dorsum.

Legs. Tarsus I lacks apical protrusions (Fig. 14) and four macrosetae with spiny tips. Tibia I with *av1* simple. Length (mean, range): tarsus I, 221, 219–221; tarsus II, 208, 203–211; tarsus III, 180, 176–184; tarsus IV, 236, 232–241; tibia I, 234, 229–238; tibia II, 72, 69–75; tibia III, 69, 68–70; tibia IV, 93, 90–94; genu I, 130, 129–131; and femur I, 289, 287–291. Ratio of body length / tibia I length = 2.5.

Adult male

Unknown.

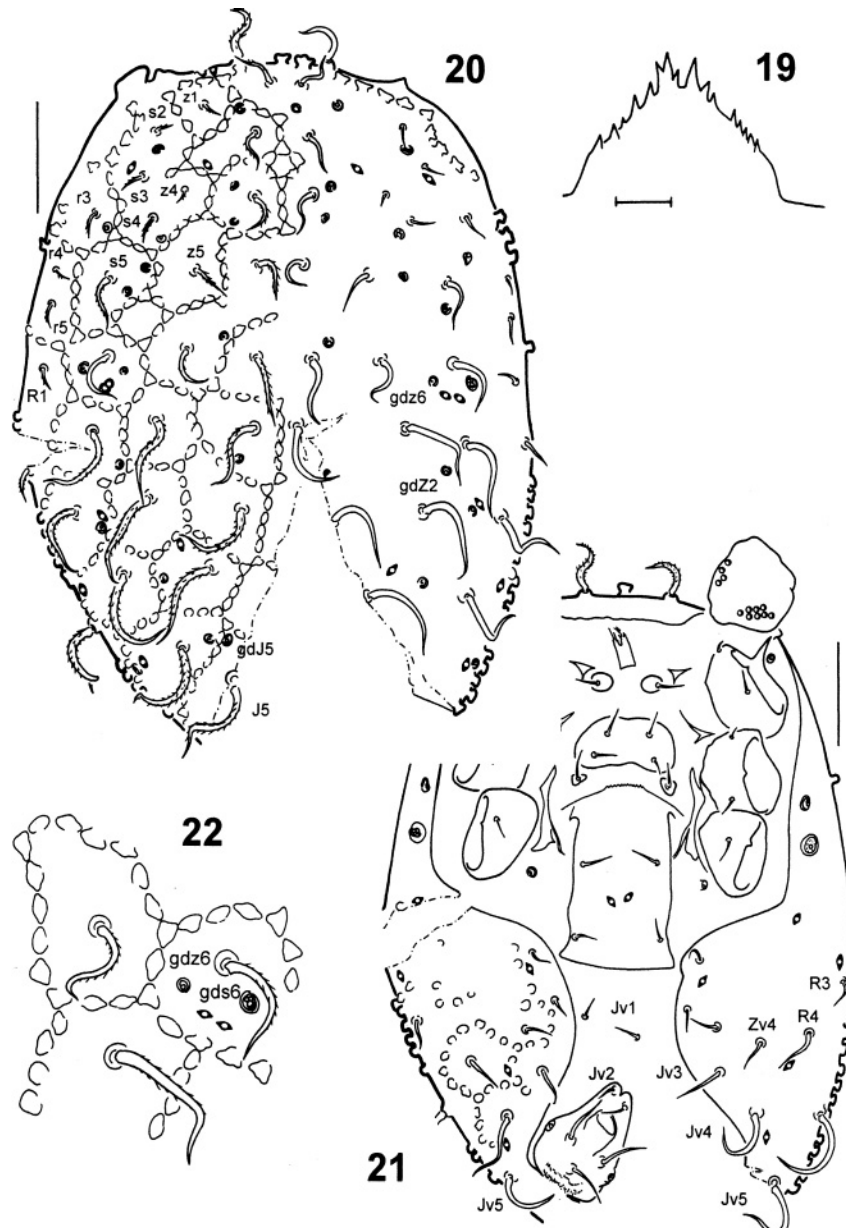
***Adenoepicrius virginianus* sp. nov.**

(Figs. 23–28)

Type material

Holotype: female. **Paratypes:** 1 female and 2 deutonymphs. **UNITED STATES. West Virginia:** Summers Co., Crumps Bottom at New River, 9 mi. due NE Athens (Airline), from wet basswood–oak leaves near spring, 26.v.1971, W.A. Shear coll., FMNH No. 71–73. Holotype and one paratype deutonymph at FMNH, other paratypes at MZUNA.

Figs. 19–22. *Adenoepicrius curtipilus*. 19, Female, tectum, dorsal; 20, female, idiosoma, dorsal; 21, female, idiosoma, ventral; 22, glandular complexes *gds6* and *gdz6*. Scale bars = 25 μ m (Fig. 19) and 100 μ m (Figs. 20, 21).



Etymology

The species' name, *virginianus*, refers to the state where the new species was found in the United States of America.

Description

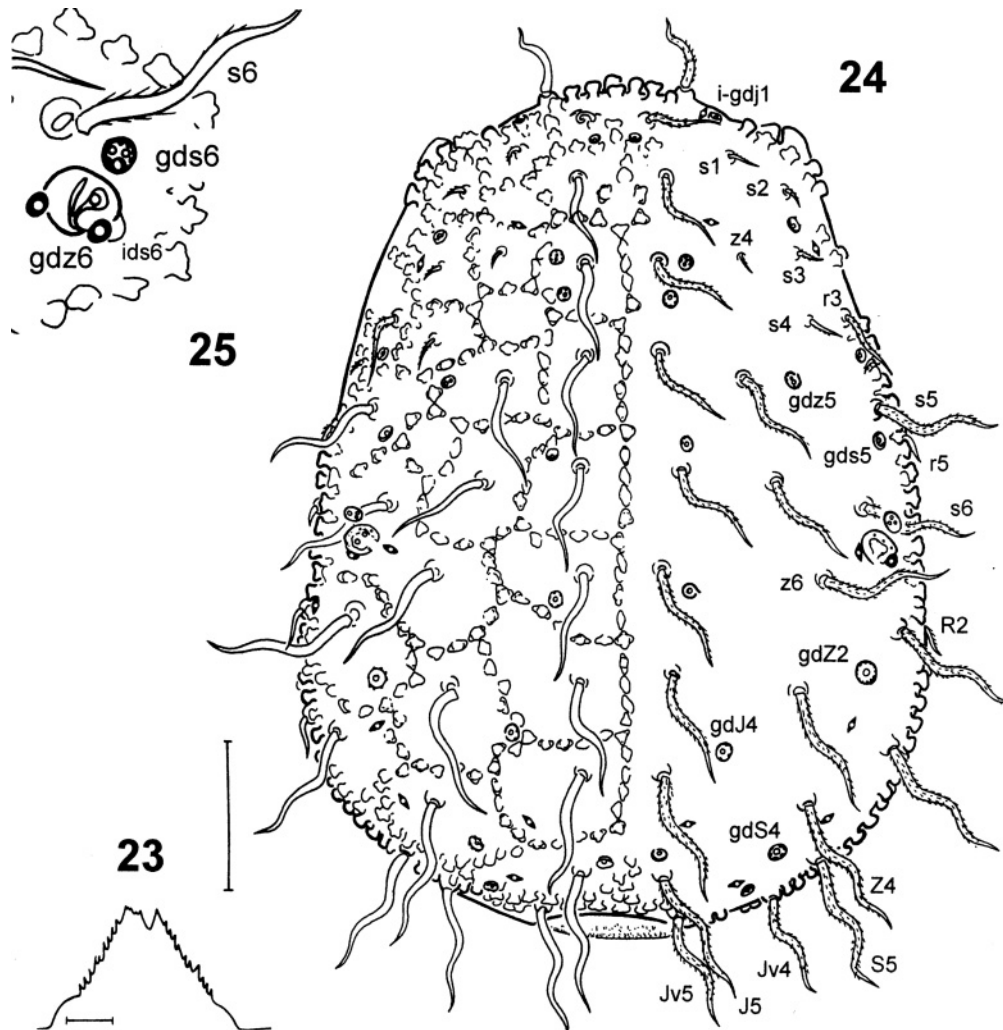
Adult female (based on two specimens)

Idiosoma. Length: 532 (mean), 522–542 (range); width: 432 (mean), 406–459 (range).

Gnathosoma. Chelicerae, palps (Figs. 26, 27), and subcapitulum normal for the genus with capitular setae barbed. Tectum as in Figure 23.

Dorsum (Fig. 24). Dorsal shield ornate, with distinctive trilobate tubercles. Dorsal setae barbed, stout, and relatively long, except for seven short pairs of podonotal setae at the anterolateral position (*s1*, *z4*, *s2*, *s3*, *s5*, *r4*, *r5*) and four pairs of opisthonotal R setae; *r3* > *s4* > *r4*; each seta in its own reticule, except that *s6* and *Z2* are in the

Figs. 23–25. *Adenoepicrius virginianus*. 23, Female, tectum, dorsal; 24, female, idiosoma, ventral; 25, glandular complexes *gds6* and *gdz6*. Scale bars = 10 μ m (Fig. 23) and 100 μ m (Fig. 24).



same reticule together with *gds6*, *gdz6*, and two pairs of lyrifissures; 13 pairs of podonotal and 6 pairs of opisthonotal glands. Glands *gds6* and *gdz6* (Fig. 25) complexes (one gland opening and two non-glandular ports); glandular complex *gdz6* conspicuous; *gdj3* and *gdz5* complex; glandular rings ornate. **Venter** (Fig. 28). Setae *st1* on large, weakly sclerotized jugulars; *st2* and *st3* on sternal shield with bilobate anterior margin (length/width ratio = 0.6) and *st4* on metasternals. Epigynal shield bearing two setae (*g* and *Zv1*) and *iv5*; wide, trapezoidal in shape, with posterior margin behind *Zv1* expanded. Gland *gv2* simple. Opisthogaster with nine pairs of setae: *Jv1* on soft cuticle, *Jv2* on anal shield, and six pairs on sclerotized ventral

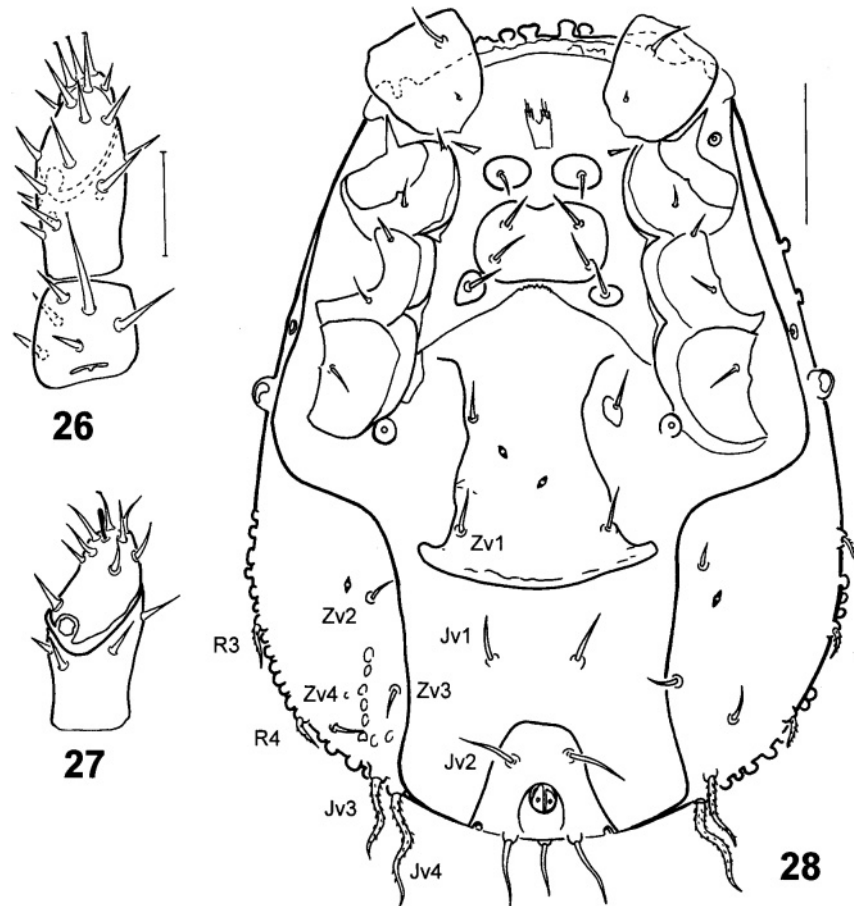
shield. Ventrianal shield fused from behind to the dorsal shield.

Legs. Chaetotaxy, adenotaxy, and poridotaxy normal. Tarsus I with apical projections, four macrosetae with spiny heads; tibia I *av1* simple. Length (mean and range except for tarsus I): tarsus I, 203; tibia I, 165, 151–179; genu I, 103, 98–107; femur I, 217, 205–228; tarsus II, 168, 154–181; tarsus III, 143, 140–145; tarsus IV, 193, 193–193; tibia II, 67, 67–67; tibia III, 63, 61–64; tibia IV, 79, 72–85. Ratio of body length / tibia I length = 3.2.

Adult male

Unknown.

Figs. 26–28. *Adenoepicrius virginianus*. 26, Female, palp, genu, tibia, and tarsus, dorsal; 27, female, palp, tibia, and tarsus, ventral; 28, female, idiosoma, ventral. Scale bars = 25 μ m (Figs. 26, 27) and 100 μ m (Fig. 28).



Key to species of *Adenoepicrius* (based on adult females)

- (1) Dorsal setae *s*₂, *s*₃, *z*₄, and *s*₄ on separate reticulae; *j*₃ ≥ *j*₃–*j*₄ and *j*₄ ≥ *j*₄–*j*₅. Seventeen pairs of dorsal glands with ornate rings; *gdj*_{2x} and *gdz*₄ absent; *gds*₆ complex; complex *gdz*₆ conspicuous. Dorsal ornamentation with trifurcate tubercles. Genitoventral shield with posterior margin expanded. Body length 532, width 432 (Figs. 23–28). *A. virginianus*
 — Dorsal setae *s*₂, *s*₃, *z*₄, and *s*₄ may share the same reticule. Genitoventral shield not expanded posteriorly 2
- (2) Dorsal setae *s*₂ and *s*₃ located in the same reticule; setae *z*₄ and *s*₄ isolated, in different reticules; *j*₃ < *j*₃–*j*₄ and *j*₄ = *j*₄–*j*₅. Dorsal ornamentation with bifurcate and trifurcate tubercles. Genitoventral shield narrow, twice as long as wide, with parallel lateral margins. Eighteen pairs of dorsal glands; *gdj*_{2x} absent. Body length 536, width 400 (Figs. 15–18) *A. oconnori*
 — Dorsal setae *s*₂, *s*₃, *z*₄, and *s*₄ located in the same reticule 3
- (3) Dorsal tubercles rounded. Setae *j*₃ = *j*₃–*j*₄; *j*₄ = *j*₄–*j*₅; 19 pairs of dorsal glands; *gdj*_{2x} and *gdz*₄ present; *s*₆, *Z*₂, *gdz*₆, and *gds*₆ in the same reticule. Metasternal platelets minute or absent. Tarsus I with apical protrusions; tibia I *av*₁ with spiny tips. Body length 713, width 683 (Figs. 1–12, 14) *A. magnus*
 — Bifurcate and trifurcate dorsal tubercles. Anterior podonotal setae “*j*” reduced in length: *j*₃ < *j*₃–*j*₄; *j*₄ < *j*₄–*j*₅; 18 pairs of dorsal glands; *s*₆, *gdz*₆, and *gds*₆ in the same reticule. Tarsus I distal protrusions absent; tibia I *av*₁ simple. Body length 601, width 450 (Figs. 19–22) *A. curtipilus*

Discussion

Several features of *Adenoepicrius* spp. may be considered unique diagnostic apomorphies: dorsal glands *gdj2x** and *gdz5** present, six pairs* of opisthotal glands (*gdJ5* and *gdS5* present), and tarsus I with four macrosetae with clubbed spiny tips (*av3*, *av4*, *pv4**, and *al4*).

Differences among the genera of Epicriidae are highlighted in the following key for females.

Key to genera of Epicriidae (based on adult females)

- (1) Dorsal chaetotaxy reduced to 15 pairs of setae, heterogeneous in length (10 pairs of podonotal and 5 pairs of opisthotal setae). Dorsal shield reduced and separated from posterior region of peritremal shields. Eleven to 13 pairs of dorsal glands. Setae *st4* on soft cuticle; *iv3* absent; nine pairs of ventral setae; *gv3*, *gv4*, and *ivp* on anal shield. Palp claw 2-tined. Tarsus I with 45 setae; two macrosetae with spiny blunt tips (*av3* and *pv3*); genu I with 12 setae. Nearctic . . . *Neoepicrius* Moraza et Johnston, 2004
 - Dorsum with 34 pairs of setae (19 podonotal and 15 opisthotal); dorsal shield extended laterally and ventrally to fuse with peritrematal and exopodal elements. Palp claw 3-tined. Tarsus I with 48 setae, with more than two macrosetae; genu I with 13 setae 2
- (2) Palptarsus with 15 setae. Thirteen pairs of dorsal glands and one pair of pustules (two or more glands at position “*gdz6*” with two glandular openings on a conspicuous protuberance); dorsal glands *gdj2* and *gdS5* absent. Seta *st4* on sternal shield or on metasternal shields; *iv3* present. Genitoventral shield expanded behind coxae IV and bearing *g* and *Zv1*. Anal or ventrianal shield free. Gland *gv2* double. Tarsus I with four spiny, clubbed macrosetae. Holarctic *Epicrius* Canestrini et Fanzago, 1877
 - Palptarsus with 14 setae. Glands at position “*gdz6*” simple or complex, non-pustule type. Lyrifissures *iv3* absent. Genital or genitoventral shield does not expand behind coxae IV. Gland *gv2* simple. Ventrianal shield free or partially fused to dorsum. Deutosternum with two rows of denticles. Males with free ventrianal shield or with anal/ventrianal shield completely fused with dorsal and ventral shields. . . . 3
- (3) Dorsal setae strongly barbed, with long setal pilosity. Fourteen pairs of dorsal glands; glands *gdz6* and *gds6* complex (one gland opening and one or two non-glandular ports); *gds6* basal to *gdz6*. Seta *st4* on soft cuticle; sternal shield may be fragmented. Anal or ventrianal shield free. Tarsus I with basal anterolateral seta (*al5*) long and barbed, two ventral macrosetae (*av3*, *pv4*) with spiny, clubbed tips. Palearctic *Berlesiana* Türk, 1943
 - Dorsal setae with short pilosity. Seventeen to 19 pairs of dorsal glands; glands *gdz6* and *gds6* simple or complex; *gds6* anterior to *gdz6*. Seta *st4* on metasternal shields. Ventrianal shield free or partially fused with dorsal shield. Tarsus I with four macrosetae with spiny clubbed tips (*av3*, *av4*, *pv4*, *al4*). Nearctic *Adenoepicrius* gen. nov.

The genus *Adenoepicrius* shares the following characteristics with other genera of Epicriidae: peritremes absent, legs I without ambulacrum and macrosetae present on tarsus I; glands *gdz6* and *gds6* simple, as in *Neoepicrius*; palptarsus with 14 setae, glandular complex *gdz6* with one gland when present, lyrifissures *iv3* absent, gland *gv2* simple, *gvi* absent and genital shield not expanded, as in *Neoepicrius* and *Berlesiana*; tibia I with *av1* macroseta spiny and males with anal shield completely fused to dorsal shield, as in *Epicrius*; and idiosomal shielding and tarsi II to IV with a dorsal platelet bearing setae *ad3* and *pd3*, as in *Berlesiana* and *Epicrius*.

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