

Article XXI.—NOTES ON A FEW NORTH AMERICAN
CYNIPIDÆ, WITH DESCRIPTIONS OF
NEW SPECIES.

By WILLIAM BEUTENMÜLLER.

PLATE XXXVII, FIGS. 1-10.

***Andricus davisi* sp. nov.**

Male.—Head yellowish brown with a large round spot on the vertex; front rugose-striate; vertex and posterior portion minutely punctate. Antennæ 14-jointed, yellowish brown. Thorax finely and evenly rugose at the sides, with the portion between the parapsidal grooves somewhat transversely rugose posteriorly; black, subopaque, anterior portion of the side to the scutellum yellowish brown, underside black. Parapsidal grooves distinct, narrow, rather deep, and widely separated at the scutellum; anterior pair of lines very fine, smooth and short; median groove from scutellum wanting. Pleuræ finely rugoso-punctate. Scutellum black, very rugose. Abdomen shining black, with the underside dull yellowish brown or piceous. Legs yellowish brown with minute hairs. Wings hyaline with yellowish veins.

Length 2-2.50 mm.

Female.—Head yellowish brown with a large black patch on the face; vertex and posterior portion black; antennæ yellowish brown. The yellowish brown color extends to the side and narrowly around the eyes. Thorax black, with a rufous patch on the pleuræ and sometimes at the sides anteriorly. Scutellum black. Abdomen shining black, somewhat rufo-piceous along the underside. Legs dull yellowish brown, somewhat infuscated, especially the hind femora and tibiæ which are very piceous. Otherwise like the male.

Length 2.50-3.25 mm.

Gall (Plate XXXVII, Figs. 1-6).—Polythalamous. Brown, sometimes speckled with pale brown. Smooth or somewhat roughened. Globular, irregularly rounded or somewhat elongate. They are single or in clusters, or a number of them coalesce forming a large knot-like mass. They are very hard, solid and woody, and contain many larval cells. The individual gall measures from 4 to 15 mm. in diameter, and the knot-like mass measures about 40 mm. in width.

Habitat.—Lakehurst, New Jersey. September.

Types. Colls. Am. Mus. Nat. Hist. and W. T. Davis.

The gall occurs singly or in clusters of from two to about twenty individuals around the twigs and branches of scrub oak (*Quercus nana*). They sometimes coalesce and form a large knot-like mass, not unlike *Andricus cornigerus*, but without the horn-like projections which characterize the latter. The galls reach maturity late in September and the flies emerge the following spring. The flies are very distinct and may be known by

the very rough, transversely rugose thorax and the absence of the median groove at the scutellum.

The flies were described from numerous specimens bred by Mr. William T. Davis and myself.

I take pleasure in naming the species after Mr. Davis, who first called my attention to this distinct species of gall and gall-fly.

Andricus wheeleri sp. nov.

Female.— Head rufous, coarsely rugoso-punctate; eyes black or partly rufous; antennæ very long, 14-jointed, rufous. Thorax rufous, very coarsely rugose. The pair of lines on the middle, from the collar, are moderately long, smooth and divergent at the ends. Parapsidal grooves rather deep, distinct but not prominent, parallel but converging as they approach the scutellum where they are widely separated. Median groove from the scutellum wanting. Outside the parapsidal grooves is an abbreviated smooth line extending forward to about the middle. Scutellum very rugose. Pleuræ finely rugose, with a polished area beneath the wing. Abdomen rufous, shining. Legs rufous, with the hind tibiæ infuscated. Wings hyaline; veins brown.

Length 2.50–3.50 mm.

Gall (Plate XXXVII, Figs. 7–9).— Polythalamous. Brown with a grayish tint, hard and woody. Irregularly rounded or elongate, somewhat potato-shaped. Measures from about 14 to 20 mm. in width and from 15 to 30 mm. in length.

Habitat.— Coconino Forest, rim of the Grand Cañon, Arizona; altitude 7,000 feet. (William M. Wheeler).

Types. Coll. Am. Mus. Nat. Hist.

The galls of this species occur around the smaller twigs of an unknown species of scrub oak. They somewhat resemble *Andricus medullæ* and *batatoides* Ashmead, but the fly is different. The flies may be distinguished by the divergent anterior lines, absence of the median groove from the scutellum, and rufous color. It is allied to *Andricus medullæ* Ashmead.

Andricus coronus sp. nov.

Female.— Head not broader than the thorax, yellowish brown, finely and evenly rugose. Eyes and ocelli black. Antennæ 14-jointed, yellowish brown. Thorax prominently rounded on top, yellowish brown, evenly and finely rugose. The pair of anterior grooves from the collar fine and narrow, extending to about the middle of the thorax. Median groove from the scutellum extending well forward to nearly the collar. Parapsidal grooves fine and narrow to the middle, thence gradually becoming broader as they approach the scutellum; subparallel and rather widely separated from the median groove at the scutellum. Scutellum rugose, with two distinct, large, shining foveæ at the base separated by a narrow ridge. Pleuræ rugose without shining areae. Abdomen almost globose, yellowish brown. Legs yellowish brown, with the claws black. Wings hyaline with honey-yellow veins.

Length 2.50–3 mm.

Gall (Plate XXXVII, Fig. 10).—Monothalamous. Pale green; soft when fresh, hard and pithy when dry. Rounded, somewhat crown-shaped, with prominent ridges at the side from the base, meeting at the apex; base pointed. Thick walled, with a large round larval cell in the center.

Length 8–12 mm.; width 6–12 mm.

Habitat.—Bronx Park, New York City, May 18, 1905; Atlanta, Georgia (R. I. Smith); Mississippi.

Types. Coll. Am. Mus. Nat. Hist.

The gall may be found in New York, in clusters on the small terminal twigs of pin oak (*Quercus palustris*) during the middle of May, and in Georgia on water oak (*Quercus aquatica*) during March. When mature, they drop to the ground or will readily break off when touched. The imago becomes fully developed in the gall by October, but does not emerge until the following spring. The fly may be known by its yellowish brown color, black eyes and ocelli, and by the lines on the thorax, especially the parapsidal grooves which widen as they approach the scutellum. The gall-fly was described from five females.

***Andricus coxii* Bassett.**

Cynips coxii BASSETT, Can. Ent., Vol. XIII, 1881, p. 112.

Andricus coxii ASHMEAD, Trans. Am. Ent. Soc. Vol. XII, 1885, p. 295; *ibid.*, Vol. XIV, 1887, p. 132; DALLA TORRE and KIEFFER, Gen. Insect. Hymenop. Cynip., 1902, p. 62.

Andricus coxi BASSETT, Trans. Am. Ent. Soc., Vol. XXVI, 1900, p. 320.

Andricus bassettianus DALLA TORRE and KIEFFER, Gen. Insect. Hymenop. Cynip., 1902, p. 61.

This species was described as *Cynips coxii* by the late Homer F. Bassett and was subsequently placed in the genus *Andricus* by Dr. William H. Ashmead. Bassett some years later redescribed, as new, his *Cynips coxii* under the name *Andricus coxi*, evidently having forgotten that he had already published the description of his species. Dalla Torre and Kieffer, not knowing that both of Bassett's names applied to one and the same species, changed the name of the one described last by Bassett to *Andricus bassettianus*. The synonymy of the species will therefore have to stand as given in the above references.

***Holcaspis perniciosus* Bassett.**

Holcaspis perniciosus BASSETT, Trans. Am. Ent. Soc., Vol. XVII, 1890, p. 68.

Holcaspis monticola GILLETTE, Ent. News, Vol. IV, 1893, p. 30.

Two female types and several galls of *Holcaspis monticola* Gillette were kindly given to me by Dr. C. P. Gillette, and they are identical with *Holcaspis perniciosus* Bassett, there being no differences whatever.

***Acraspis macrocarpæ* Bassett.**

Acraspis macrocarpæ BASSETT, Trans. Am. Ent. Soc., Vol. XVII, 1890, p. 84.
Acraspis undulata GILLETTE, Ent. News, Vol. IV, 1893, p. 28.

Two type specimens of the gall-flies and several galls of *Acraspis undulata* were kindly given to me by Dr. C. P. Gillette. Although Dr. Gillette points out some differences between the flies of *A. undulata* and *A. macrocarpæ*, I fail to see any differences whatever between the two species. The galls of *A. undulata* are also identical with those of *A. macrocarpæ*. The galls of *A. undulata* occur on the undersides of the leaves of *Quercus undulata*, and those of *A. macrocarpæ* on *Quercus macrocarpa*.

***Dryophanta eburneus* Bassett.**

Dryophanta eburneus BASSETT, Trans. Am. Ent. Soc., Vol. XVII, 1890, p. 70.
Dryophanta glabra GILLETTE, Can. Ent., Vol. XXVI, 1894, p. 237.

Two gall-flies and several galls of *Dryophanta glabra* Gillette were given to me by Dr. C. P. Gillette and they are identical with *Dryophanta eburneus* Bassett.

***Callirhytes tuberosa* Bassett.**

Andricus (Callirhytis) tuberosa BASSETT, Trans. Am. Ent. Soc., Vol. XXVI, 1900, p. 311.

A number of galls of this species were sent to me by Miss Annette F. Braun from Cincinnati, Ohio, collected on the shingle oak (*Quercus imbricaria*). Bassett described it from Waterbury, Connecticut, where it was found on the scrub oak (*Quercus nana*).

***Neuroterus laurifoliæ* Ashmead.**

Neuroterus laurifoliæ ASHMEAD, Trans. Am. Ent. Soc., Vol. XIV, 1887, pp. 128, 140.

Specimens of the galls of this species were collected by Dr. Mel. T. Cook in Illinois on the leaves of the shingle oak (*Quercus imbricaria*) and by Miss Annette F. Braun at Cincinnati, Ohio, on the same kind of tree. Heretofore it was known from Florida, on the laurel oak (*Quercus laurifolia*).

EXPLANATION OF PLATE XXXVII.

- Figs. 1-6.—*Andricus davisii* sp. nov.
 Figs. 7-9.—*Andricus wheeleri* sp. nov.
 Fig. 10.—*Andricus coronus* sp. nov.



GALLS OF NEW CYNIPIDÆ.

