SOME ERIOPHYID MITES OCCURRING IN GEORGIA WITH
DESCRIPTIONS OF THREE NEW SPECIES 1, 2

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This paper increases the number of species known to occur in Georgia
from 6 to 34. The species are listed below with their host(s), type of
damage, and collection data. All host relationships listed are the same
as those accompanying the original descriptions, except where specific
references are cited. Unless otherwise stated, all species were collected by
the author. All new species have been examined by Mr. H. H. Keifer, Cali-
ifornia Department of Agriculture. Specimens collected during the early
summer months in 1961 were mounted in Hoyers medium and are now
beginning to deteriorate. All other specimens have been treated and
mounted as prescribed by Keifer (1954).

ERIOPHYINAE

Aceria caulitis (Cook) n. comb.
The mite attacks black walnut, Juglans nigra L., and induces and lives
in a purselike erineum gall on the leaf petioles. It was collected by Mr.
U. G. Moore, 12 June 1961, Cherokee County, Georgia.

Aceria neocynodonis K.
The mite is recorded from bermuda grass, Cynodon dactylon (L.). It
causes a typical rosetting and tufting of the growth resulting from a
shortening of the internodes and often killing the plants (Tuttle and
Butler 1961). The species was collected by Mr. Elmer Beck, 25 October 1962,
Tift County, Georgia.

Aceria nyssae (Trotter)
The mite attacks black gum, Nyssa sylvatica Marsh., causing the forma-
tion of beadlike galls on the undersurface of the leaves. It was collected
15 June 1961, Bulloch County, Georgia.

Aceria theospyri K.
The mite is recorded from persimmon, Diospyros virginiana L., inducing
the formation of small bead galls that protrude on the upper surface and

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Georgia.
open on the undersurface of the leaf. It was collected 1 June 1961, Clarke County, Georgia.

*Aceria vaccinii* (K.)


The blueberry bud mite attacks several species in the plant genus *Vaccinium*. Keifer (1941) lists Georgian hosts as *V. elliottii* Chapm., collected at Midway; *V. fuscatum* (Ait.), collected at Valdosta; *V. amoenum* Ait., and *V. aff. austrole* Small, collected at Brunswick. The mite was also collected 7 June 1961, from *V. (Polyedum)* sp., in Johnson County, Georgia, by the author.

The typical injury caused by the mite is an unnatural succulence and epidermal roughening or blistering at the bases of the fruit bud scales, causing them to hang in a tight rosette. The damage apparently has little effect on normal fruit production other than a shortening of the fruit stems. No damage is usually associated with the mite living on the vegetative parts.

_Eriophyes insidiosis_ Keifer and Wilson


The presence of the mite in Georgia, has been confirmed by Mr. George Kaloostain (personal communication 1961), formerly with the USDA, Fort Valley, Georgia.

**Phyllocoptinae**

*Aculus caryfoliae* K.


The mite is recorded as a leaf vagrant on shagbark hickory, *Carya ovata* Mill., and as causing severe leaf rusting. It was collected from pecan, *Carya pecan* (Marsh.), a new host record, 7 July 1961, Clarke County, Georgia. Some leaf rusting was noted to occur on pecan also.

*Aculus grandidentatus* K.


The species is recorded as an undersurface leaf vagrant causing little damage to big tooth aspen, *Populus grandidentatus* Michx., and eastern cottonwood, *P. deltoides* Brit. It was collected from *P. deltoides*, 7 June, 1961, Washington County, Georgia.

*Aculus ligustri* (K.)


The privet rust mite, recorded as a leaf vagrant on privet, *Ligustrum* sp., was collected from that genus on 4 July 1961, Clayton County, Georgia.

*Calacarus adornatus* (K.)

The purple camellia mite is recorded as attacking snowball bush, *Viburnum opulus* L., and *Camellia japonica* L. The mites are vagrants on both surfaces of the leaves, causing little damage but leaving conspicuous white cast skins adhering to the leaf surfaces. The species was collected by Dr. C. M. Beckham, from camellia, 17 April, 1961, Spaulding County, Georgia.

*Caepitrimeres gibsoni* K.


The mite is recorded as attacking California huckleberry, *Vaccinium ovatum* Pursh. It inhabits the fresh succulent twigs around the lateral buds on the shaded portions of the plants. The species was collected as an undersurface leaf vagrant on *Vaccinium* (*Polycodium*) sp., 7 June 1961, Johnson County, Georgia.

*Ceecidophyes quercicolaee* K.


The mite is recorded as an undersurface leaf vagrant, especially along the leaf ribs, on white oak, *Quercus alba* L. It was collected 6 September 1961, Clarke County, Georgia.

*Cenaloxy nyssae* K.


This undersurface leaf vagrant is recorded as inhabiting areas along the leaf ribs of black gum, *Nyssa sylvatica* Marsh. The species was collected 15 June 1961, Bulloch County, Georgia.

*Coctophylla caliquerci* K.


The mite is recorded from valley white oak, *Quercus lobata* Nee., in California and causes no apparent damage. It is an upper surface leaf vagrant and usually does not appear in great numbers until late in the summer. The species was collected 23 August 1961, from blackjack oak, *Quercus marilandica* Muench., a new host record, in Clarke County, Georgia.

*Epitrimeres trilobus* (Nal.)


The mite is recorded as attacking black elder, *Sambucus nigra* L., and elderberry, *S. glauca* Nutt., often causing a yellowing and curling or stunting of the leaflets, particularly on the terminals. It was collected 7 June 1961, from common elder, *S. canadensis* L., a new host record, in Washington County, Georgia. The new host showed extensive curling of the margins of the terminal leaflets.

*Johnella virginiana* K.


This undersurface leaf vagrant lives among the stellate pubescences on the leaves of live oak, *Quercus virginiana* Mill., and causes no apparent damage. It was collected 15 September 1961, Clarke County, Georgia.
Fig. 1. *Oxypleurites erigerivagrans*, n. sp.; D, dorsal view; F, feather-claw; GC, genital flap and coxae; S, side view.

*Oxypleurites erigerivagrans*, new species (Fig. 1)

*O. erigerivagrans* is distinguished by the short dorsal setae, simple 4-rayed featherclaw and the sublateral type of granulations beneath the dorsal shield.

**Female:** 185$\mu$ long, 50$\mu$ thick, wedge-shaped, light amber in color. Rostrum 20$\mu$ long, projecting down. Dorsal shield 50$\mu$ long, 60$\mu$ wide, design absent except for submedial lines; dorsal tubercles 34$\mu$ apart, projecting backwards from rear margin in a short distance; setae 4$\mu$ long and projecting backwards. Forelegs 37$\mu$ long; tibia 6$\mu$ long; tarsus 9$\mu$ long; claw 5$\mu$ long, knobbed; featherclaw undivided and 4-rayed. Hindlegs 33$\mu$ long. Coxal design absent. Abdomen somewhat convex above; tergites numbering about 15, moderately broad and smooth, giving away to 4 or 5 sternites; sternites numbering 75 to 80. Lateral seta 22$\mu$ long, on about
spernite 16; first ventral seta 19μ long, on about spernite 32; second ventral seta 9μ long, on about spernite 54; third ventral seta 11μ long, on 5th spernite from rear; accessory seta missing. Genitalia 20μ wide, 10μ long, overlap with 14 to 16 longitudinal scores; seta 10μ long.

Male not studied.

The species was collected 7 June, 1961, from Erigeron strigosus Muhl. (Compositae), in Hancock County, Georgia. It attacks all green portions of its host and causes little apparent damage. The type material includes the holotype and 17 paratypes. The holotype and 11 paratypes are in the author's collection, and 3 paratypes each will be deposited in the University of Georgia and the California Department of Agriculture collections.

Oxyleurites sinus K.


This undersurface leaf vagrant is recorded from alder, *Alnus rugosa* (Du Roi). It was collected from common alder, *Alnus serrulata* (Ait.), a new host record, 7 June 1961, Wilkinson County, Georgia.

Phyllocoptes cribratus K.


The mite is recorded as an undersurface leaf vagrant on persimmon, *Diospyros virginiana* L., and as causing rusting of the leaves. It was collected 1 June 1961, Clarke County, Georgia.

Phyllocoptes liquidambaris K.


The mite is recorded as an upper surface leaf vagrant on sweet gum, *Liquidambar styraciflua* L., and as causing no apparent damage. It has been collected by Mr. H. H. Keifer, 14 May 1940, Brunswick, Georgia, and by the author, 15 May 1961, Clarke County, Georgia.

Vasates cornutus (Banks)


The silver peach mite is recorded as a leaf vagrant on both sides of the leaves of peach, *Amygdalus persica* Batsch; almond, *Prunus* sp.; and nectarine, *Prunus* sp. The effect on the host is a silver sheen on the older leaves and a mottling or yellow dots or a longitudinal rolling of the younger leaves. The presence of the species in Georgia has been confirmed by Mr. George Kaloostain (personal communication, 1961), formerly with the USDA, Fort Valley, Georgia.

Vasates laevigatae (Hassan)


The mite is recorded as forming bead galls with openings on the undersurface of the leaves of red willow, *Salix laevigata* Bebb. The galls are usually clumped in distribution, often one limb having many and other limbs none. The species was collected from willow, *Salix* sp., 7 June 1961, Hancock County, Georgia.
Vasates lyecopersici (Massee)


The tomato russet mite is recorded as a vagrant on the green parts of many solanaceous plants. The reader is referred to Rice and Strong (1962) for a complete host list. Perennial hosts are usually affected by some discoloration of the leaves but annuals such as tomatoes are usually killed by heavy infestations. The species was reported from Georgia by Anderson (1954).

Vasates magnolivora (K.)


The mite is recorded as living among the pubescence on the undersurface of the leaves and occasionally around the flower buds of Magnolia grandiflora L., the evergreen magnolia, and as causing no apparent damage. It was collected 8 August 1961, Clarke County, Georgia. The collection was made from a heavy infestation, and yellowing, browning, and premature dropping of the leaves were noted.

Vasates toxicophagus (Ewing)


The poison oak leaf-gall mite is recorded as forming bead galls on the leaves and in some cases causing a yellowing and deforming of the terminal leaves on poison oak, Rhus diversiloba T. & G. The species was collected 15 August 1962, Clarke County, Georgia.

Tetra robiniae K.


This undersurface leaf vagrant is recorded from black locust, Robinia pseudoacacia L., and as causing little damage. It was collected 17 August 1962, Clarke County, Georgia.

**RHYNGAPHYTOPTINAE**

Apodiptacuscordiformis K.


The mite is recorded as an undersurface leaf vagrant appearing as a tiny tuft of flocculent white wax on butternut hickory, Carya cordiformis (Wang.). It has been collected several times in Georgia from seven different host species. The following is a list of hosts and collection data.

<table>
<thead>
<tr>
<th>Host</th>
<th>Collection Date</th>
<th>County</th>
</tr>
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<tbody>
<tr>
<td>Amygdalus persica</td>
<td>23 August 1961</td>
<td>Clarke County</td>
</tr>
<tr>
<td>Carya ovata (Mill.)</td>
<td>12 September 1962</td>
<td>Clarke County</td>
</tr>
<tr>
<td>Carya pecan Marsh.</td>
<td>23 August 1961</td>
<td>Clarke County</td>
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<tr>
<td>Carya pecan Marsh.</td>
<td>1 September 1961</td>
<td>Clarke County</td>
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<tr>
<td>Juglans nigra L.</td>
<td>7 July 1961</td>
<td>Clarke County</td>
</tr>
<tr>
<td>Juglans nigra L.</td>
<td>15 August 1962</td>
<td>Clarke County</td>
</tr>
<tr>
<td>Liquidambar stracitua L.</td>
<td>26 August 1962</td>
<td>Clarke County</td>
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<tr>
<td>Morus alba L.</td>
<td>4 July 1961</td>
<td>Clayton County</td>
</tr>
<tr>
<td>Quercus phellos L.</td>
<td>15 August 1962</td>
<td>Clarke County</td>
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Fig. 2. *Diptacus georgiana*, n. sp.; D, dorsal view; F, featherclaw; GC, genital flap and coxae; S, side view.

*Diptacus georgiana*, new species (Fig. 2)

*D. georgiana* is similar to *D. rubra* Keifer. It differs in having shorter dorsal setae and by possessing only three rays on each side of the divided featherclaw.

**Female**: 165μ long, 82μ thick, robust-spindleform, amber in color. Rostrum 42μ long, projecting down. Dorsal shield 38μ long, 52μ wide, design consisting of admedian and one submedian as figured. Dorsal seta
11 µ long, projecting forward. Forelegs 38 µ long; tibia 10 µ long with setae; tarsus 8 µ long; claw 5 µ long, knobbed; feathereclaw divided, 3-rayed on a side. Anterior coxae nearly touching, design absent; first coxal tubercule farther from midline than the second; second tubercules well ahead of transverse line through third tubercules. Abdomen with about 45 tergites with about 2 sternites per tergite for the anterior two-thirds. Sternite microtuberculate, becoming less prominent dorsally. Lateral seta 19 µ long, on about sternite 17; first ventral seta 32 µ long, on about sternite 33; second ventral seta 12 µ long, on about sternite 50; third ventral seta 20 µ long, on 7th sternite from rear; accessory seta missing. Genitalia 22 µ wide, 20 µ long; cover flap smooth; seta 7 µ long.

Male not studied.

The species was collected 12 September 1961, from willow oak, Quercus phellos L., Clarke County, Georgia. The mites are undersurface leaf vagrants appearing as tiny tufts of flocculent white wax and apparently cause little damage. The type material includes the holotype and 11 paratypes. The holotype and 5 paratypes are in the author's collection. The paratypes each will be deposited in the University of Georgia and the California Department of Agriculture collections.

Diptacus gigantorhynchus (Nal.)

The big-beaked plum mite is recorded as a vagrant on the undersurface of the leaves and as causing no apparent damage to prune, Prunus domestica L.; peach, Amygdalus persica Batsch; plum, Prunus sp.; blackberry, Rubus vitifolius C. & S.; flowering almond, Prunus triloba Lindl.; and grape, Vitis californica Benth. The mite was collected on Vitis sp., 7 June 1961, Hancock County, Georgia.

Rhynacrus abronius (K.)

The mite is recorded as living among the hairs on the undersurfaces of the leaves on native blackberry, Rubus vitifolius C. & S. It was collected from blackberry, Rubus sp., September 1961, by Mr. Minter Dupree, in Spalding County, Georgia.

Rhynacrus breitloui, new species (Fig. 3)
R. breitloui fits this genus very well except for possessing a very short, weak setae I on the forecoxae. Other distinguishing features are the 20-22 longitudinal scores on the genital cover flap and the divided 5-rayed feathereclaw.
Fig. 3. *Rhynacus breitlowi*, n. sp.; D, dorsal view; F, featherclaw; GC, genital flap and coxae; S, side view.
FEMALE: 187\(\mu\) long, 82\(\mu\) thick, spindleform, amber in color. Rostrum 50\(\mu\) long, projecting down. Dorsal shield 35\(\mu\) long, 70\(\mu\) wide; indented slightly on anterior margin; not projecting over rostral base; design consisting of median, admedian and four submedian lines as figured; dorsal tubercles minute, seta absent. Legs with femoral seta missing. Forelegs 38\(\mu\) long; tibia 8\(\mu\) long; tarsus 10\(\mu\) long; claw 8\(\mu\) long; knobbed and straight or slightly curved; featherclaw divided, 5-rayed on a side. Hindlegs 33\(\mu\) long, patellar seta absent. First coxae separated, seta I present, short and on inner margin. Abdomen entirely microtuberculate, a shallow furrow on the anterior third of each side of tergum; tergites about 62, sternites about 72. Lateral seta missing; first ventral seta 90\(\mu\) long, on about sternite 26; second ventral seta 60\(\mu\) long, on about sternite 44; third ventral seta 35\(\mu\) long, on about 10th sternite from rear; accessory seta missing. Genitalia 48\(\mu\) wide, 33\(\mu\) long, coverflap margin with about 22 short longitudinal scores; seta 11\(\mu\) long.

Male not studied.

The species was collected 14 August 1962, from evergreen magnolia, *Magnolia grandiflora* L., Clarke County, Georgia. The mites are underside leaf vagrants among the pubescence and apparently cause little damage. The type material includes the holotype and nine paratypes. The holotype and three paratypes are in the author’s collection, and three paratypes each will be deposited in the University of Georgia and the California Department of Agriculture collections.

*Rhyncaphytoptus atlanticus* K.


This underside leaf vagrant is recorded from American elm, *Ulmus americana* L. It was collected 16 September 1961, Clarke County, Georgia.

*Rhyncaphytoptus ulmivagrans* K.


The mite is recorded as a vagrant on the underside of the leaves of the elms, *Ulmus campestris* L. and *U. pumila* L., and apparently causes little damage. It was collected from winged elm, *U. alata* Michx., a new host record, 7 June 1961, Laurens County, Georgia.

*Trimerotes aleyrodiformis* (K.)


This underside leaf vagrant is recorded from sweet gum, *Liquidambar styraciflua* L., and as causing no apparent damage. The species was collected at Brunswick, Georgia, by Mr. H. H. Keifer, 14 May 1940, and by the author, 17 August 1961, Clarke County, Georgia.
Summary

Twenty-nine species of eriophyids, including 3 new species, not previously known for the state of Georgia are listed. This brings the total number of eriophyid species known to occur in the state to 34. Descriptions and host data are presented for the adult females of Oxypleurus erigerivagrans, n. sp., Diptacus georgiana, n. sp., and Rhynacus breitlowi, n. sp.

Literature Cited


News Notes

Agricultural Experiment Station News

Dr. Dale Habeck has joined the Entomology Department of the Agricultural Experiment Station in Gainesville. Dr. Habeck has degrees from the University of Wisconsin and North Carolina State University at Raleigh. He has been with the University of Hawaii the past four years.

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Recent promotions in the Florida Agricultural Experiment Stations include Drs. R. M. Baranowski and E. D. Harris, Jr., from Assistant Entomologist to Associate Entomologist.