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**Two new species and new locality of Eriophyid Mites
(Acari: Eriophyoidea) from Nigeria³**

ABSTRACT

One species of family *Eriophyidae*, subfamily *Eriophyinae*: *Aceria combreti* n. sp. and one species of family *Diptilomiopidae*, subfamily *Diptilomiopinae*: *Diptilorhynacus dioscoreae* n. sp. are described from Nigeria. Third species, *Eriophyes lepidaturi* Farkas, described from the neighbourhood of Victoria Lake, East Africa was found in Nigeria and it is its second known locality. *E. lepidaturi* Farkas and *A. combreti* n. sp. cause galls on *Alchornea laxiflora* and *Combretum* sp., respectively, and *D. dioscoreae* causes a discoloration of the leaves of yellow yam, economical subsistence crop plant.

Two species of eriophyid mites, *Aceria combreti* and *Diptilorhynacus dioscoreae* are described as new. *Eriophyes lepidaturi* Farkas, described from the neighbourhood of Victoria Lake, East Africa, was found in Ibadan, Nigeria.

Type materials are deposited at the Department of Applied Entomology, SGGW, Warsaw, Poland and Istituto di Entomologia agraria, Bari, Italy.

***Aceria combreti* n. sp.**

(Figs. 1-2)

Female. — 175 μm long (range of 23 specimens 175-192 μm); 30 μm wide, 31 μm thick; wormlike; white, almost transparent. Rostrum 13 μm long;

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rostral seta 4 μm long; chelicerae 9 μm long, almost straight. Dorsal shield 25 μm long, without lobe over rostrum, with straight median, curved admedian and one long and some short submedian lines on each side. Dorsal tubercles on rear shield margin; 17 μm apart, with dorsal setae 28 μm long, directed to the rear and diverging. Foreleg 28 μm long; tibia 5 μm long; tarsus 5 μm long; claw 7 μm long, unknobbed; featherclaw 5 μm long, 7-rayed. Hindleg 24 μm long; tibia 5 μm long; tarsus 5 μm long; claw 7 μm long, unknobbed; featherclaw 5 μm long. Coxae with ornamentation of granules; first forecoxal tubercles 7 μm apart; setae 6 μm long; second forecoxal tubercles 5 μm apart; setae 20 μm long. Hindcoxal tubercles 10 μm apart; setae 25 μm long, sternum 6 μm long. Opisthosoma with about 80 microtuberculate rings. Microtubercles oval, touching rings dorsally and slightly pointed ventrally. Lateral setae 21 μm long, on sternite 14; first ventral setae 37 μm long, on sternite 27; second ventral setae 40 μm long, on sternite 47; third ventral setae 10 μm long, on sternite 75. Last six rings with elongated microtubercles. Accessory seta 3 μm long. Female genitalia 12 μm long, 19 μm wide; genital coverflap with very minute striae; genital setae 11 μm apart, 11 μm long.

Male. — 150 μm long; dorsal tubercles 18 μm apart; dorsal setae 24 μm long; opisthosoma with about 72 rings; male genitalia 14 μm wide.

Nymph II. — 92 μm long; shield 18 μm long; chelicerae 6 μm long; dorsal setae 16 μm long.

Host plant. — *Combretum* sp. (*Combretaceae*).

Relation to host plant: causing galls on leaves, mainly at the topical parts of the branches.

Type material. — Holotypes: female on slide; type locality: Jebba,

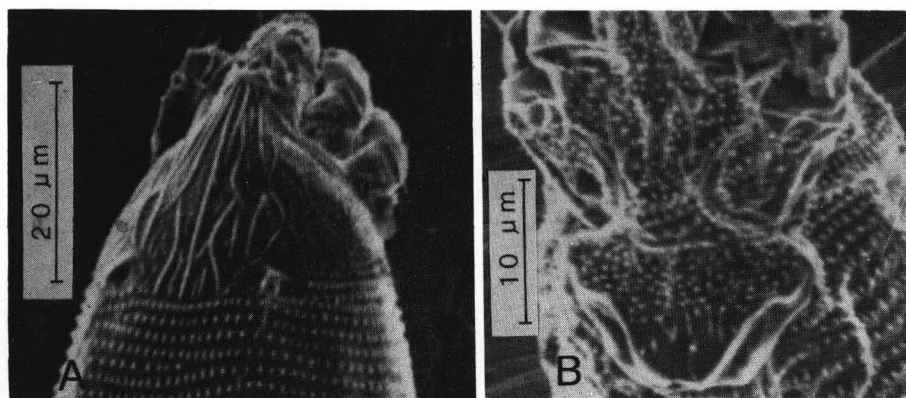


Fig. 1 - *Aceria combreti* n. sp., S.E.M. micrographs: A, dorsal view of anterior section of shield; B, female genitalia and coxae.

Nigeria; 29 November 1985, collected by JAN BOCZEK. Paratypes (23), 29 November 1985.

This species is close to *Aceria tulipae* (K.) described from the USA (KEIFER, 1938) and can be distinguished by shield shape and its pattern, ornamentation of coxae and shape of genital coverflap. In *A. tulipae* shield is rounded with short median line; coxae with longitudinal specks; coverflap with longitudinal striae. In *A. combreti* n. sp. shield is triangular with median line as long as the shield; coxal ornamentation of granules and genital coverflap with broken, short striae. This is first species of *Aceria* known as living on plants of *Combretaceae* family (DAVIS *et al.*, 1982).

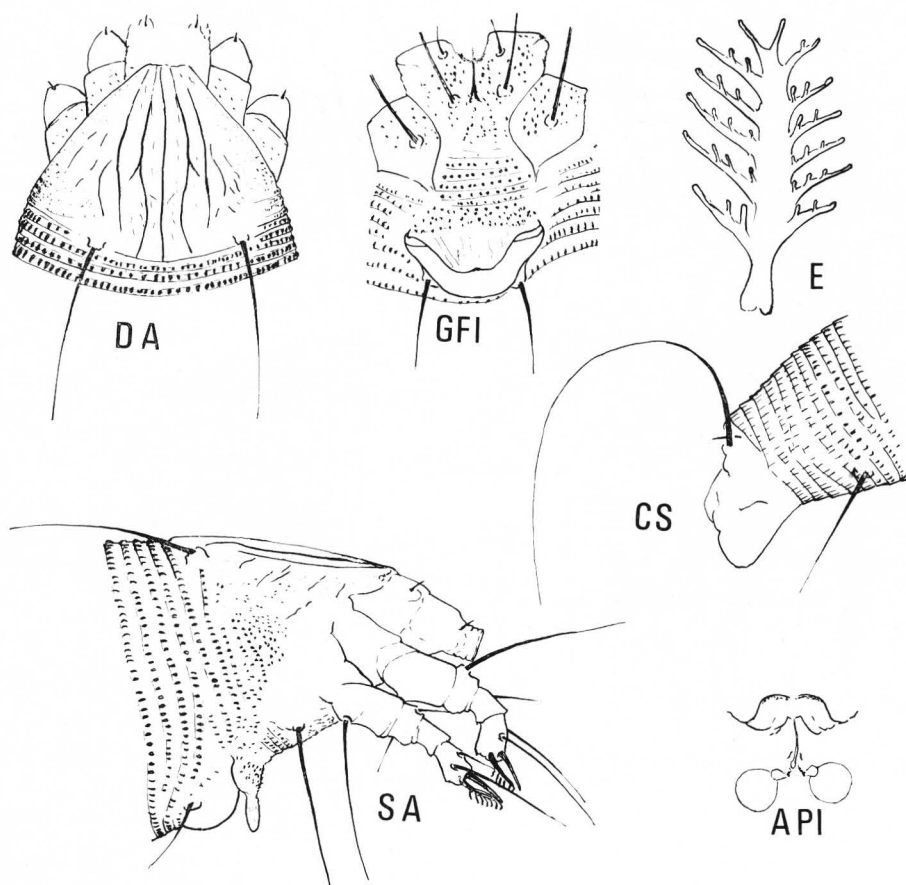


Fig. 2 - *Aceria combreti* n. sp.: API, internal genital structures; CFI, external female genitalia and coxae from below; CS, lateral caudal section of mite; DA, dorsal diagram of anterior section; E, empodium (featherclaw); SA, anterior view of side of mite.

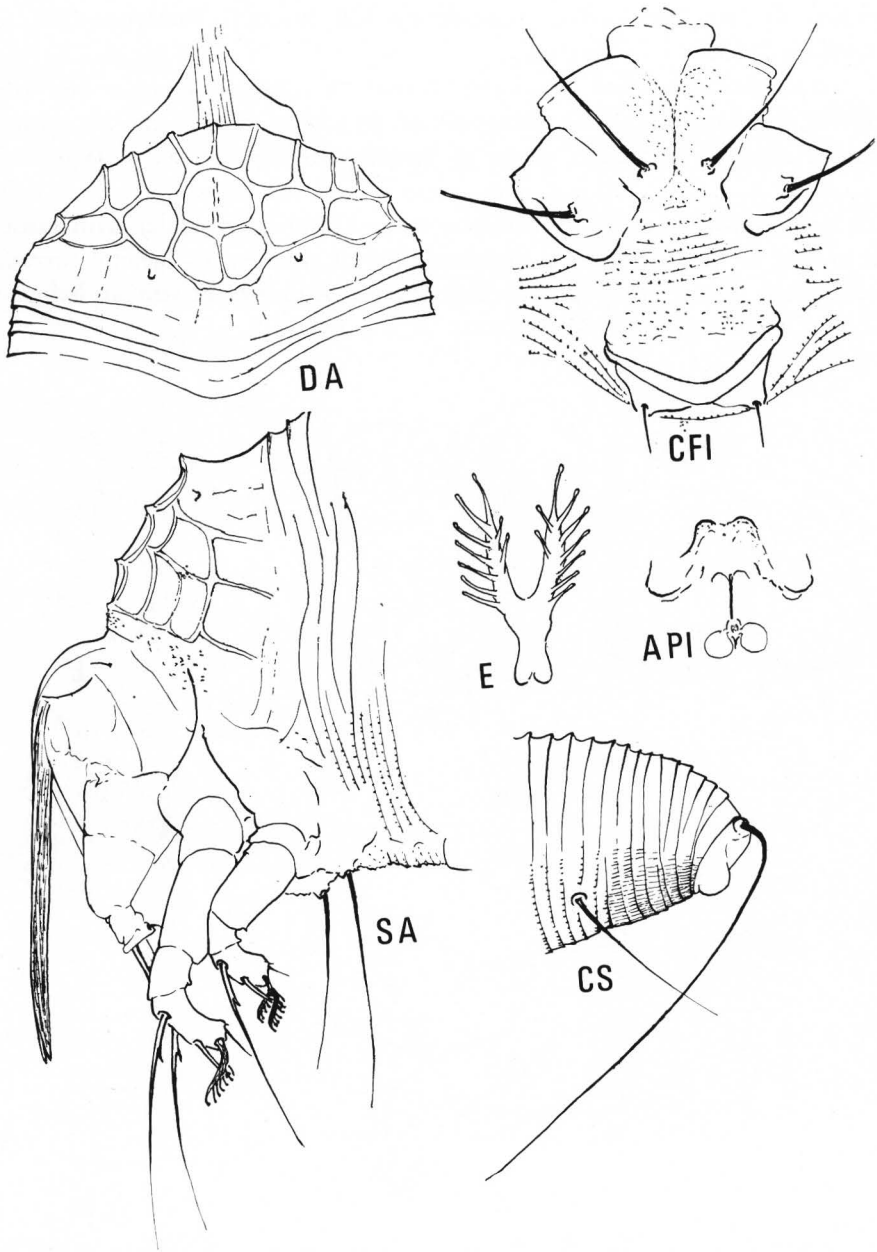


Fig. 3 - *Diptilorhynacus dioscoreae* n. sp.: API, internal genital structures; CFI, external female genitalia and coxae from below; CS, lateral caudal section of mite; DA, dorsal diagram of anterior section; E, empodium (featherclaw); SA, anterior view of side of mite.

Diptilorhynacus dioscoreae n. sp.

(Fig. 3)

Female. — 184 μm long (range of 30 specimens 180-210 μm); 62 μm wide; fusiform; pinkish in color. Rostrum 40 μm long; rostral seta 3 μm long; chelicerae 60 μm long, abruptly bent down. Dorsal shield 28 μm long, 50 μm wide, without lobe over rostrum, with net-like pattern composed of about 17 concave cels. Dorsal tubercles 4 μm ahead of rear shield margin; 18 μm apart, with dorsal setae absent. Foreleg 38 μm long; tibia 10 μm long; tarsus 13 μm long with proximal tarsal seta 35 μm long with a short branch 4 μm from the base; patellar and tibial setae missing; claw 7 μm long, straight, knobbed; featherclaw 10 μm long, divided, 7-rayed. Hindleg 27 μm long; tibia 5 μm long; tarsus 8 μm long; claw 6 μm long, knobbed; featherclaw divided, 10 μm long. Coxae with ornamentation of granules; first forecoxal tubercles and setae absent; second forecoxal tubercles 9 μm apart; setae 17 μm long. Hindcoxal tubercles 34 μm apart; setae 18 μm long; sternum 6 μm long. Opisthosoma with 56 smooth tergites (55-63) forming low central longitudinal ridge and

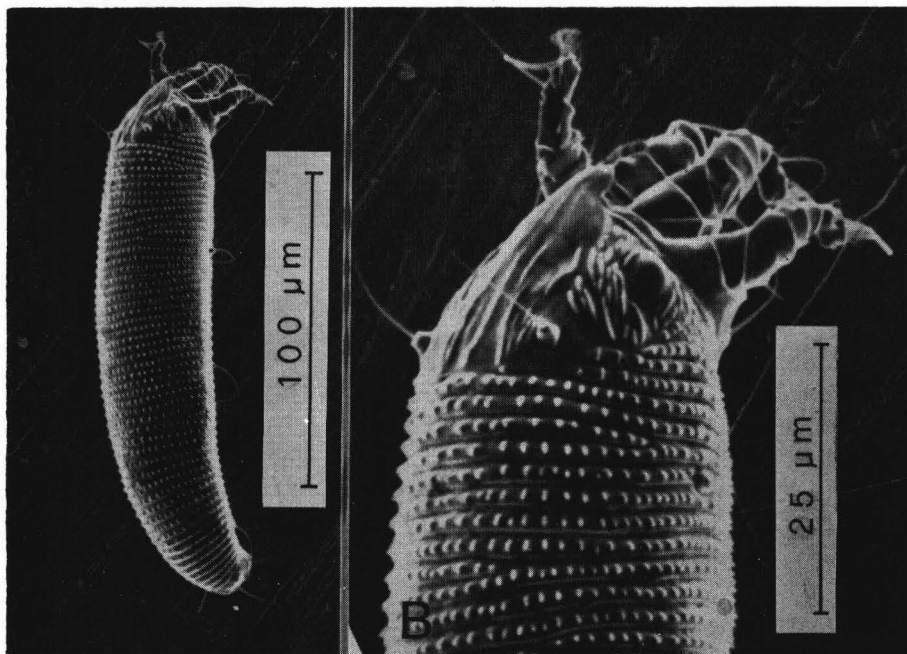


Fig. 4 - *Eriophyes lepidaturi* Farkas, S.E.M. micrographs: A, sublateral general view; B, subdorsal anterior section.

shallow subdorsal throughs and about 80 microtuberculate sternites. Microtubercles elongated, on last 8 rings as long as ring's width. Accessory setae absent. Lateral setae absent; first ventral setae 10 μm long, on sternite 30; second ventral setae 7 μm long, on sternite 48; third ventral setae 30 μm long, on sternite 71. Last 8 rings with elongated tubercles. Female genitalia 17 μm long, 26 μm wide; genital coverflap with some transversal broken lines; genital setae 18 μm apart, 5 μm long.

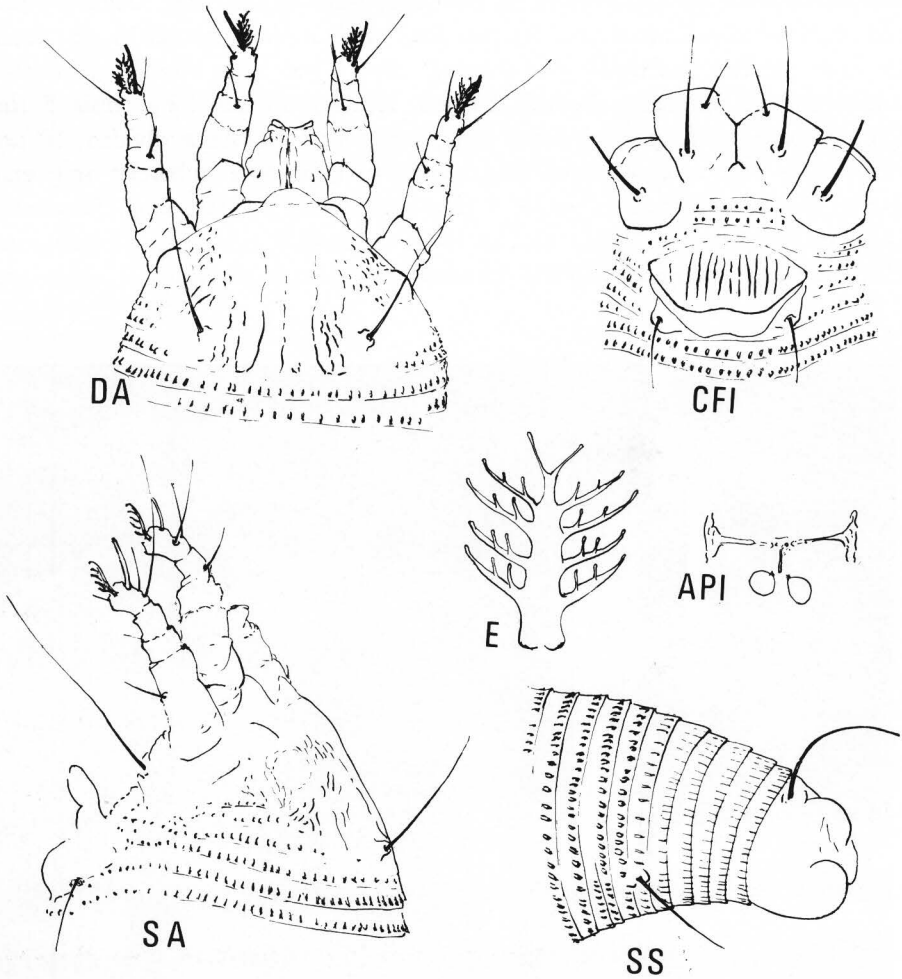


Fig. 5 - *Eriophyes lepidaturi* Farkas: API, internal genital structures; CFI, external female genitalia and coxae from below; CS, lateral caudal section of mite; DA, dorsal diagram of anterior section; E, empodium (featherclaw); SA, anterior view of side of mite.

Male. — 170 μm long, shield 24 μm long; male genitalia 16 μm wide.

Host plant. — *Dioscorea cayenensis* Lam. (yellow yam) (*Dioscoreaceae*).

Relation to host plant. — Vagrant on undersurface of the leaves causing some discoloration.

Type material. — Holotype: female on slide; type locality: Ife, Nigeria; date 22 November 1985, collected by JAN BOCZEK. Paratypes (29), 22 November 1985.

This species is close to *D. sinusetus* Mondal, Ghosh, Chakrabarti described from India (MONDAL *et al.*, 1981) and can be distinguished by shield shape, presence of dorsal tubercles, shield and genital coverflap pattern and the appearance of tarsal setae. In *D. sinusetus* the shield is very narrow, almost oval, dorsal tubercles and setae are missing, genital coverflap with longitudinal striae, tarsal setae are sinuate. In *D. dioscoreae* dorsal shield rhomboidal with dorsal tubercles; genital coverflap without longitudinal striae, tarsal setae very long with small branch at the base. This is the first species of eriophyid mite found on plants of *Dioscoreaceae* family.

Eriophyes lepidaturi Farkas

(Figs. 4-5)

This species was described from *Lepidoturus laxiflorus* Benth. (*Euphorbiaceae*) dried in herbarium in 1910 (FARKAS, 1960), from East Africa, near Victoria Lake. Mites studied by us were collected on *Alchornea laxiflora* (*Euphorbiaceae*) in Ibadan, Nigeria on November 13, 1985. This is second locality known for this species. On both of those plant species the mites cause fingerlike galls on upper surface of the leaves. Mites studied by us had longer body length, 192-264 μm .

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RIASSUNTO

DUE NUOVE SPECIE E UNA NUOVA SEGNALAZIONE DI ERIOFIDI (*Acari: Eriophyoidea*) DELLA NIGERIA

Vengono descritte due nuove specie di Eriofidi della fauna Nigeriana: *Aceria combreti* e *Diptilorhynacus dioscoreae* infeudate rispettivamente a *Combretum* sp. (*Combretaceae*) e

Dioscorea cayenensis Lam. (*Dioscoreaceae*); è segnalato per la prima volta in Nigeria
Eriophyes lepidaturi Farkas galligeno su *Alchornea laxiflora*.

Aceria combreti n. sp. causa galle sulle foglie, soprattutto della parte apicale della
pianta; è la prima specie del genere *Aceria* segnalata su piante della famiglia *Combretaceae*.

Diptilorhynacus dioscoreae n. sp. è vagante e causa decolorazioni su foglie della pianta
ospite che è largamente coltivata per il frutto utilizzato nell'alimentazione delle popola-
zioni locali.

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