# SHORT SCIENTIFIC NOTES

New Records of Alternate Hosts of Tobacco Caterpillar, Spodoptera litura Fab. (Noctuidae: Lepidoptera. and Bihar Hairy Caterpillar, Diacrisia obliqua Wlk.) (Arctiidae: Lepidoptera)\*

Tabacco caterpillar, a polyphagous pest which had been reported to attack about 103 host plants<sup>1</sup> <sup>2</sup>, was found damaging gladiolus by feeding on the flowers extensively at the experimental farm, Hessaraghatta, of the Indian Institute of Horticultural Research. A spray of 0.05% paration emulsion could effectively control the pest.

Bihar hairy caterpillar, a similar polyphagous pest with over 40 host plants<sup>3-5</sup>, caused severe damage to the globe artichoke (Cyanara scolymus) by feeding on the leaves. These alternate hosts of both the pests are placed on record for the first time.

Thanks are due to Dr. G. S. Randhawa, Director, Indian Institute of Horticultural Research, Bangalore, for encouragement,

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Horticultural Research.
Bangalore-6,
November 3, 1974.

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## First Record of a Host for the Chalcid Parasite Brachymeria croceogastralis Joseph et al.

During the course of rearing of *Perina nuda* Fabr. (Lepidoptera: Lymantriidae) which fed on the leaves of fig trees in our college orchard in October 1960, a number of chalcids emerged from the pupae in the laboratory. The parasites were identified as *Brachymeria croceogastralis* Joseph et al. (Chalcididae). Joseph et al.<sup>2</sup> have described the species from specimens collected at Bangalore (India) from unidentified pupa but no specific host of the parasite has been reported. The parasite complex mentioned by Cherian and

Israel<sup>1</sup> does not include *B. croceogastralis* and as such forms a first record.

Thanks are due to Prof. K. J. Joseph for having identified the parasite and to Prof. T. R. Subramaniam for the facilities provided.

Dept. of Entomology, B. Vasantharaj David. Tamil Nadu Agril. Univ., A. V. Navarajan Paul. Coimbatore 641003, September 26, 1974.

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# Leaf Margin Roll Gall on Ficus tomentosa Roxb. Caused by a Psyllid Mycopsylla gardenesis Bhanotor (Hemiptera)

The psyllid, Mycopsylla gardenesis Bhanotor has been observed for the first time to cause leaf margin roll gall on Ficus tomentosa Roxb. in and around Madurai region. Feeding by the psyllids results in a typical phytotoxemia of primary tissue malformation on the leaves. The apex of the leaf is rolled and folded back on the underside upto half way of the leaf blade and/or leaf margins on the lateral sides are sharply folded and fixed on the lower side. The entire blade becomes rolled, crinkled and spirally twisted into a tubular structure in young leaves. The rolling of the blade is almost accompanied by swelling, crinkling and curling.

Groups of greenish flattened nymphs remain feeding inside the leaf rolls in a cottony cushion. Whitish waxen threads project from the extremity of abdomen giving an appearance of masses of cotton to the nymphal aggregation. Adults disperse throughout the branches. Honey dew, secreted copiously by the nymphs, drops downwards and attracts several flies and wasps.

A pit gall caused by Trioza sp. on Ficus religiosa L. and a pouch gall on Ficus glomerata Roxb, by Pauropsylla depressa Crawf, have been reported from India<sup>2</sup>. Trotter<sup>3</sup> has observed a leaf margin roll gall on Ficus nervosa Heyne<sup>1</sup>, caused by an unknown psyllid from Formosa. This is the first record of leaf margin roll gall on Ficus tomentosa Roxb, caused by a psyllid.

<sup>\*</sup> Contribution No. 342 of Indian Institute of Horticultural Research, 255, Upper Palace Orchards, Bangalore-6.

<sup>1.</sup> Mathur, R. N., *Indian For. Rec.*, New Ser. Ent. J, 1942, p. 145.

<sup>2</sup> Sevastopolo, D. G., J. Bombay Nat. Hist. Soc., 1951, 48, 265.

<sup>3.</sup> Lal. B. S., Entomology in India, Entomological Society of India, 1963, p. 198.

<sup>4.</sup> Mathur, A. C., Indian J. Ent., 1962, 24, 286.

<sup>5.</sup> Pandey, N. D., Ibid., 1968, 30, 229.

The authors are thankful to Dr. D. Hollis, British Museum (Natural History), London, for having kindly identified the psyllids.

Dept. of Entomology, Agricultural College, Madurai-625104 November 23, 1974.

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#### Achiya stellata de Bary-A New Record from India

Achlya stellata has been recently isolated from a water sample from Gorakhpur which forms the first record of this fungus from India. The following description of the isolate is made from bacteriafree cultures growing on sterilized hemp-seed halves in sterile distilled water at 22-25° C.

#### Achlya stellata de Bary

Mycelium moderately extensive, diffuse; twoweek-old colony 1.5-2.5 cm in diameter; principal hyphae slender, branched,  $70-105 \mu$  in diameter at base. Zoosporangia moderately abundant fusiform or clavate, less frequently naviculate or filiform; 275-550  $\mu$  long by 18-45  $\mu$  in diameter, predominantly  $350-500 \times 25-35 \,\mu$ ; renewed sympodially, occasionally cymosely; zoospore discharge achlyoid; spore cluster not persistent; encysted spores  $7.3-10 \mu$  in diameter. Gemmae absent. Oogonia abundant, terminal on main hyphae or on lateral branches which are commonly curved or rarely once coiled; oogonia spherical pyriform, often with a neck, the basal septum often having an inward projection;  $35-84 \mu$  in diameter predominantly  $55.5-70 \mu$ inclusive of ornamentations. Oogonial wall unpitted; densely ornamented with conical or mammiform papillae. Antheridia usually absent or very sparse—present on about 1% oogonia; when present be considered to be purely developmental in which normally one to an oogonium; monoclinous (androgynous) on a long or rarely short antheridial branch, antheridial cells thin walled, tubular or clavate; apically or very rarely laterally appressed to the oogonium. Oospheres usually one, rarely two in an oogonium, normally, spherical but occasionally ovoid, filling the oogonium and maturing. Oospores subcentric; 32.5-46.5 µ in diameter, predominantly  $30-37 \mu$ .

from Jalwania Pond, Gorakhpur, Collected January 12, 1974. I wish to thank Dr. M. W. Dick, University of Reading, England, for critically examining the description and offering valuable suggestons. I also wish to thank Dr. Y. B. Singh, Principal, St. Andrew's College, Gorakhphr, for providing facilities for work.

G. C. SRIVASTAVA. Dept. of Botany, St. Andrew's College, Gorakhpur (India), September 7, 1974.

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### Axillary Testis in the Common House Crow (Corvus splendens Vieillot) and Cattle Egret (Bubulcus ibis Linnaeus)

While studying the annual reproductive cycle of some avian species inhabiting the semi-arid and arid tracts of Rajasthan one specimen each of the common house crow and egret was encountered which exhibited an axillary testis. Both the abnormal birds were examined in the month of July when the birds were sexually active.

In most of the birds including the crow and egret the left testis is longer than the right. However, in the abnormal birds the left testis was smaller than the right. The left axillary testis was attached independently and was in direct communication with the left vas deferens.

Histologically, the axillary testis of common house crow and cattle egret resembled in every respect with the individual testes of the abnormal specimens as well as with the testes of normal sexually active males dissected on the same day. The axillary testes of both the specimens were spermatogenetically active containing all stages of developing germ cells.

In the absence of earlier reports, the above abnormalities in the male reproductive organs of the common house crow and the cattle egret, may probably physiological rather than cytological or genetic changes are concerned.

Reproductive Physiology Section, Department of Zoology, University of Rajasthan, Jaipur, December 17, 1974. D. K. VYAS.