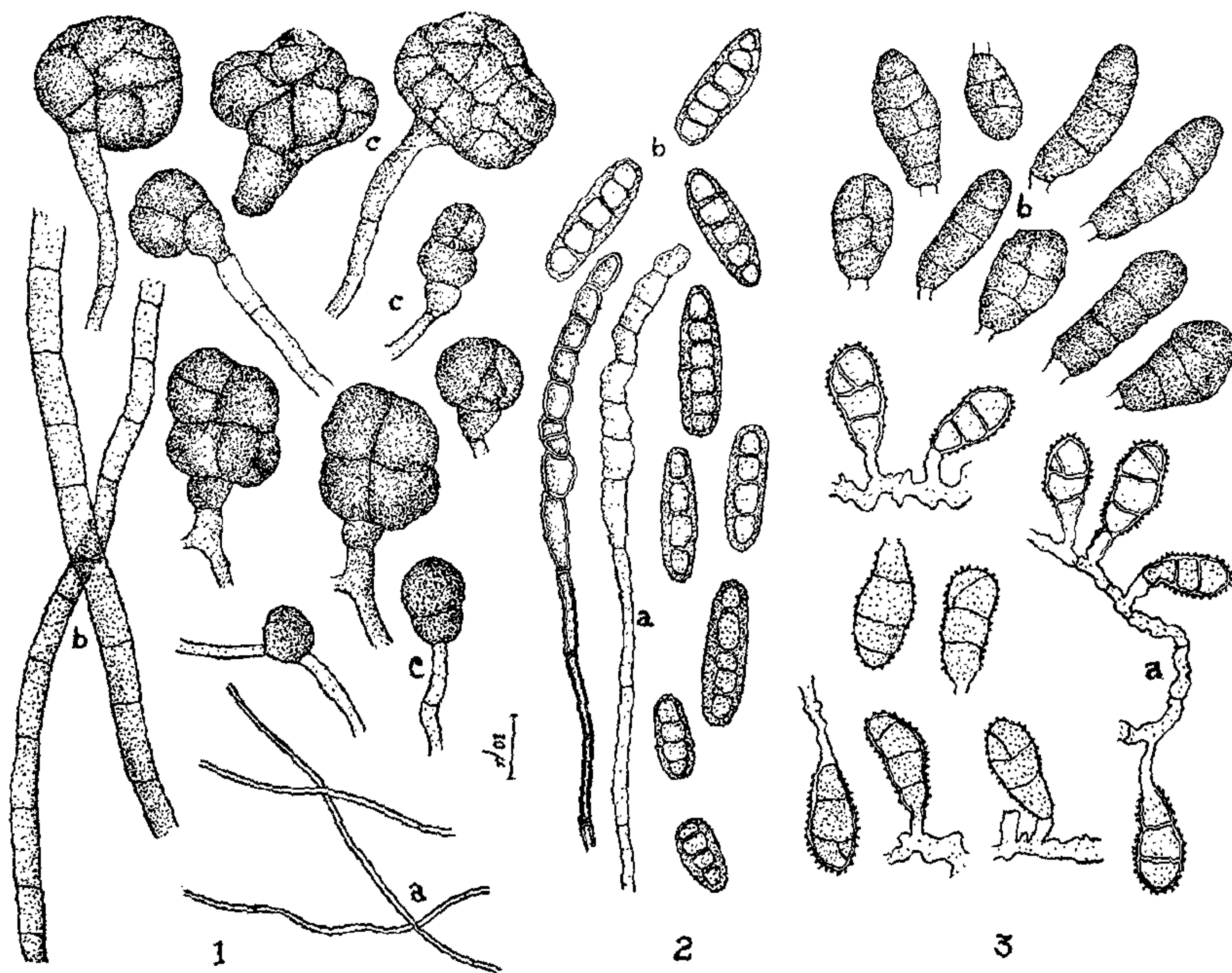


THREE NEW RECORDS OF FUNGI FROM SOILS

DURING the course of studies of fungi occurring in soils of Andhra Pradesh, the authors have isolated *Acrospeira fluctuata*, *Helminthosporium hawaiiense* and *Pithomyces sacchari*, which have not been recorded from soil so far.¹

Acrospeira fluctuata Tandon and Bilgrami in Sci. & Cult., 1961, 27 : 407-08.

types of conidia is as follows: 2-celled $12.8-14.4 \times 7.2-11.2 \mu$ ($13.4 \times 9.1 \mu$), 3-celled $9.6-16.0 \times 8.0-14.4 \mu$ ($11.4 \times 12.8 \mu$), 4-celled $14.4-17.6 \times 6.4-8.0 \mu$ ($16.1 \times 7.2 \mu$), 5-celled $16.0-22.4 \times 8.0-9.6 \mu$ ($18.8 \times 8.1 \mu$), 6-celled $22.4-25.6 \times 6.4-9.6 \mu$ ($24.0 \times 7.2 \mu$), 7-celled $16.0-27.2 \times 8.0-16.8 \mu$ ($20.5 \times 12.9 \mu$), 10-celled $16.0-32.0 \times 8.0-25.6 \mu$ ($24.1 \times 14.5 \mu$), 14-celled $25.6-36.8 \times 8.0-16.0 \mu$ ($30.5 \times 12.3 \mu$).



FIGS. 1-3. Fig. 1 *Acrospeira fluctuata*. a, thin hyaline; b, thick brown hyphae; c, conidiophores and conidia. Fig. 2. *Helminthosporium hawaiiense*. a, conidiospores; b, conidia. Fig. 3. *Pithomyces sacchari*. a, mycelium, conidiophores and young conidia; b, mature conidia.

Colonies of the fungus growing well on potato sucrose agar, upto 5.0 cm. diameter in seven days, first light grey, becoming dark grey with age; mycelium composing of a network of thin hyaline and thick brown hyphae; conidiophores both terminal and lateral, light brown, $5.2-8.0 \mu$ in width, flattened end bearing conidia of very variable shape and size; conidia dark brown, 2-14-celled with straight or oblique septa. The size of the different

Isolated by the authors from soil supporting *Anacardium occidentale* L. at Sahibnagar, Hyderabad (28-2-1966, OUF-18).

Helminthosporium hawaiiense Bugnicourt in Rev. gen. Bot., 1955, 62 : 238-43.

Colonies of the fungus spreading rapidly on potato sucrose agar, dark grey with abundant aerial mycelium; conidiophores simple, slightly geniculate, dark brown, septate, $42.2-175.2 \times$

3.6–4.2 μ ; conidia cylindrical, pale brown, 3–5 septate, 22.0–51.2 \times 6.4–9.6 μ .

Isolated by the authors from coastal dune soil, Chirala, Guntur District (25-6-1963, OUF-19).

Pithomyces sacchari (Speg.) M.B. Ellis in *Mycol. Pap.*, 1900, 76: 17; Agnihothrudu, V., *J. Indian bot. Soc.*, 1962, 41: 478–490.

Colonies of the fungus growing slowly on Horne and Mitter's medium, upto 4.0 cm. diameter in weekdays, at first white, slowly turning olive-grey and finally to black; mycelium superficial, forming a network of branched, olive-brown, smooth, occasionally verruculose hyphae, 2.5 μ in width; conidiophores borne laterally on the hyphae, straight or curved, hyaline to subhyaline, 2.4–7.2 \times 1.6–3.2 μ ; conidia formed singly at the apex of conidiophore, variable in shape, oval to pyriform with 1–3 transverse septa and rarely with 1 or 2 vertical septa, pale brown when young, dark brown at maturity, smooth to verruculose, 12.0–25.0 \times 4.0–12.8 μ , 12.8 μ at the broadest part.

Isolated by the authors from soil supporting *Eucalyptus* sp. at Sahibnagar, Hyderabad (28-9-1966, OUF-20).

The cultures are deposited in the Mycology and Plant Pathology Laboratory, Osmania University, Hyderabad.

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THE OCCURRENCE OF SEXUAL FORM OF *PENTALONIA* *NIGRONERVOSA* COQUEREL

SEXUALES were hitherto unknown of *Pentalonia nigronervosa* Coquerel, the banana aphid which is common on *Musa* spp. in tropical and subtropical regions of the world. Hille Ris Lambers (1949) was doubtful about the occurrence of sexual forms of the species while Kolkaila and Soliman (1954) asserted that this species leads entirely an anholocyclic life-cycle.

While working with the aphids of Calcutta and suburbs, the apterous oviparous morph of *Pentalonia nigronervosa* Coq. was discovered from the leaf-sheath of *Curcuma longa* Linn. (Zingiberaceae) [Locality: Rautara, 24-Parganas, West Bengal; 17-12-1967; coll. L. K. Ghosh]. The ant *Tetramorium* sp. was found attending this aphid. The apterous oviparous female is rather oval, about 1.12 mm. long and is characterised by its rostrum, which is much longer than that of apterous and alate viviparous female, reaching past the bases of siphunculi; cauda bearing 5 hairs; and swollen hind tibiae having 46 and 49 more or less round pseudosensoria.

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