

Ascomycetes of Maharashtra — II

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With 4 Figs. in the text

The writer collected several Ascomycetes in and around Poona, many of which were found to be saprophytic occurring on dead stems and woods. Critical study revealed, some of them to be new species based on detailed morphological comparisons and host relationships. The genus *Teichospora* has been reported for the fourth time and *Physalospora* a new addition to India.

1. *Pleospora wehmeyerii* sp. nov. Pande.

Perithecia superficialia, dispersa, globosa vel piriformia, ostiolata, $120-220 \times 128-180 \mu$, setis obscure brunneis, septatis, simplicibus, $80-300 \times 3-12 \mu$ praedita; asci cylindracei, crasse tunicati, 8-spori, $64-84 \times 8-12 \mu$; paraphysoides adsunt; sporae monostichae, oblongae, brunneae, transverse 3- longitudinaliter 1-2-septatae, $12-16 \times 8 \mu$.

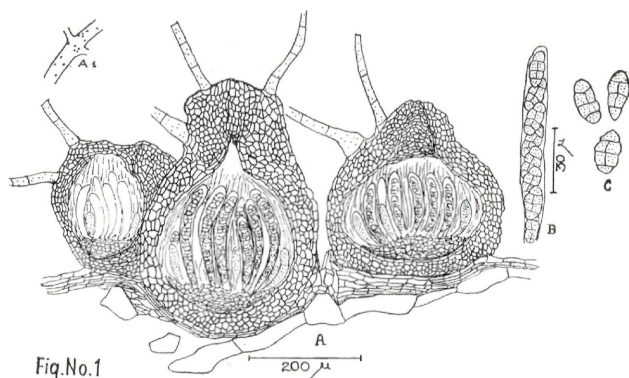


Fig. 1. *Pleospora wehmeyerii* sp. nov. Pande. — A₁ Habit. — A Perithecium. — B Ascus. — C Ascospores

Infection spots superficial, black, hairy, minute. Perithecia black, superficial, scattered, globose to pyriform, setose, ostiolate, $120-220 \times 128-180 \mu$, setae, dark brown, septate, unbranched; $80-300 \times 3-12 \mu$. Asci cylindrical, hyaline, bitunicate, octosporous, $64-84 \times 8-12 \mu$, paraphysoids present. Ascospores brown, oblong, uniseriate, muriform with distinct 3-transverse septa and 1 or 2 vertical septa; $12-16 \times 8 \mu$.

Collected on dead stems of *Lantana camara* L. (Verbenaceae) by A. K. Pande at Poona (India) on 3rd Oct. 1967, M. A. C. S. Herb. No. 637 (Type).

This genus has been reported previously from Maharashtra on *Lantana camara* L. by Rao (1966) as *P. herbarum* Rab. which is a type species for the genus. Critical and detailed comparison of the

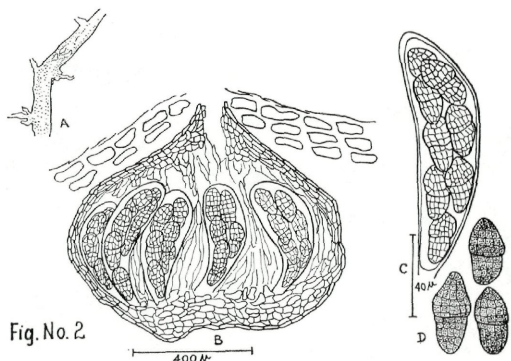


Fig. 2. *Pleospora dalbergiae* sp. nov. Pande. — A Habit. — B Perithecium. — C Ascus. — D Ascospores

writer's collection with the type species and Rao's (1966) collection on *Lantana camara* revealed the writer's collection to be significantly distinct in having setose and smaller ascocarps, smaller asci and ascospores and uniformly septate ascospores, on the basis of which it is considered as a new species.

The fungus is described after Dr. L. E. W e h m e y e r in recognition of his pioneer contributions to this genus.

2. *Pleospora dalbergiae* sp. nov. Pande.

Perithecia innata, dispersa, globosa, interdum depressa, ostiolata, $160-448 \times 160-560 \mu$ asci crasse clavati, crasse tunicati, 8-spore,

80—120 × 24—32 μ ; paraphysoides adsunt; sporae oblongo-ellipsoideae, luteae, muriformes, 32—40 × 16 μ .

Infection spots black, minute, bursting through narrow slits in the cork. Perithecia black, embedded, scattered, globose to somewhat flattened, ostiolate; 160—448 × 160—560 μ . Asci broadly clavate, hyaline, bitunicate, 8-spored, 80—120 × 24—32 μ . Paraphysoids present. Ascospores oblong-ellipsoid, yellow, biseriata, muriform, X-septate; 32—40 × 16 μ .

Collected on dried stems of *Dalbergia melanoxylon*, G. P. (Papilionaceae), by A. K. P a n d e at Poona (India) on 26th Sept. 1967, M. A. C. S. Herb. No. 638 (type).

As there was no previous report of a *Pleospora* on this host or

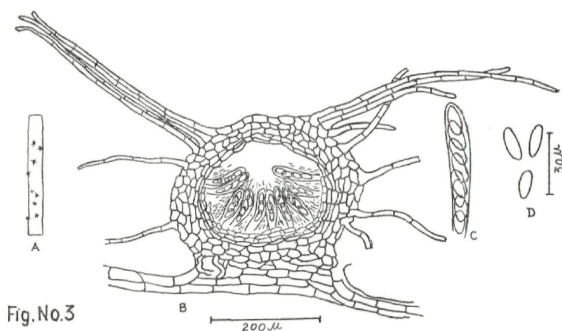


Fig. 3. *Physalospora indica* sp. nov. Pande. — A Habit. — B Perithecia. — C Ascus. — D Ascospores

family, this collection was compared with morphologically similar species of *Pleospora* and found to be distinct in having smaller asci and ascospores, which are light yellow in colour.

3. *Physalospora indica* sp. nov. Pande.

Maculae minutae nigrescentes, dispersae; perithecia solitaria, primum innata, postea erumpentia, globosa, ostiolata, 240—400 μ diam., setis obscure brunneis, septatis, 192—480 × 4 μ praedita; asci cylindracei, paraphysati, tenuiter tunicati, 8-sporei, 60—84 × 8 μ ; sporae monostichae, fusoidae, continuae, hyalinae 12—16 × 8 μ .

Infection spots minute, black, hairy and scattered. Perithecia dark, separate, at first embedded, later erumpent, globose, ostiolate, setose, 240—400 μ , setae dark-brown septate, 192—480 × 4 μ . Asci cylindrical,

paraphysate, hyaline, unitunicate, octosporous, $60-84 \times 8 \mu$. Ascospores fusiform, hyaline, uniseriate, 1-celled, $12-16 \times 8 \mu$.

On dead branches of *Cestrum nocturnum*, (Solanaceae) collected by A. K. Pande at Mahabaleshwar (India) on 15th Oct. 1967, M. A. C. S. Herb. No. 639 (Type).

This genus is a new addition to Indian Fungi and was therefore compared with the type species *P. chilensis*, Speng. and found to be new to Science. *Cestrum nocturnum* constitutes a new host record for this genus.

4. *Teichospora obducens* (Fr.) Fuck.

Infections spots black, minute, scattered. Perithecia embedded, black globose, separate, ostiolate, $180-320 \times 200-340 \mu$. Asci long, cylindrical,

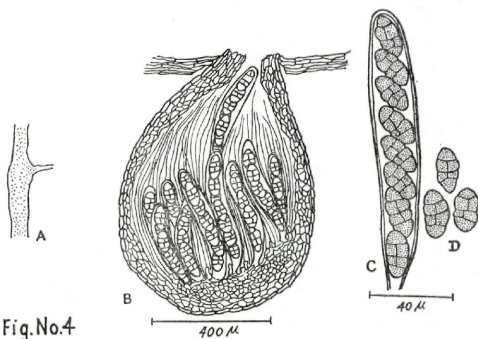


Fig.No.4

Fig. 4. *Teichospora obducens* (Fr.) Fuck. — A Habti. — B Perithecium. — C Ascus. — D Ascospores

hyaline, paraphysate, bitunicate, 8-spored, $132-140 \times 20 \mu$. Ascospores dark brown, uniseriate, muriform, oblong, with 3 transverse and 1-2 longitudinal septa, $20 \times 12 \mu$.

Collected on dead stems of *Dalbergia melanoxylon*, G. & P. (Papilionaceae) by A. K. Pande at Poona on 26th Sept. 1967, M. A. C. S. Herb. No. 640 (Type).

Likhite (1937) reported the genus for the first time from India on *Pennisetum typhoideum*, followed by another report of *T. indica* on *Cycas revoluta* by Tandon & Bilgrami (1960) and *T. lantanæ* on *Lantana camara* by R. Rao (1960) but none on this host. On the basis of comparative studies, the writer's collection agrees with the type species of the genus and forms a new host record.

Material of the above species is being deposited in Herb. Indiae Orient. New Delhi, India, Herbarium, C. M. I., Kew, Surrey, England; besides Mycological Herbarium M. A. C. S., Poona 4, India.

A c k n o w l e d g e m e n t

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R e f e r e n c e s

1. Likhite, V. N. 1933. A. *Teichospora* on Bajri. Proc. Indian Sci. Congr. 20: 62—63.
2. Rao, Ramachandra, 1966. A new species of *Teichospora* from India. Mycopath Mycol. appl. 28: 63—64.
3. Tandon, R. N. & Bilgrami, 1960. A new fungus on the leaflets of cycas. Curr. Sci. 29: 57—58.
4. Wehmeyer, L. E. 1961. A world Monograph of the genus *Pleospora* and its segregates. Univ. Michigan Press. An. Arbor.

ZOBODAT - www.zobodat.at

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