

New phytopathogenic Fungi Imperfecti from Maharashtra (India)

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In the course of her routine Mycological survey for new fungi in and around Poona, the writer made several collections of Phytopathogenic Fungi-Imperfecti during the year 1966. None of these fungi herein described have been previously reported on the respective host plants and are therefore presented here as new to science, based on comparative studies and host relationship, along with latin diagnosis.

1. *Phyllosticta flacourtiiae* sp. nov. Chiplonkar (Fig. 1).

Infection spots necrotic white, irregular in outline, with brown margin, 1—2 cm broad. Pycnidia dark, scattered, epiphyllous, ostiolate, subepidermal, round to flattened; $68-120 \times 50-60 \mu$. Pycnidiospores oval, one celled, hyaline; $5.1-8.5 \times 1.8-2.4 \mu$.

Maculae irregulares, albae, brunneo-marginatae, 1—2 cm diam.; pycnidia epiphylla, subepidermalia, nigrescentia, dispersa, globosa, plus minusve depressa, $68-120 \times 50-60 \mu$; conidia ovoidea, continua, hyalina, $5.1-8.5 \times 1.8-2.4 \mu$.

Leg. Alaka Chiplonkar on living as well as dried leaves of *Flacourtia sepiaria* Roxb. at Sinhagad (Poona, India) on 18th September 1966. M. A. C. S. No. 296 (Type).

2. *Bispora muehlenbeckiae* sp. nv. Chiplonkar (Fig. 2).

Infection spots shaning black especially when fresh, turning to dirty brown in exicattae; 1 mm. to 1 cm. long. Mycelium brown, septate, branched, superficial but only occasionally with a few simple peg like haustoria into the epidermal cells, $2-3 \mu$ broad. Conidiophores small peg like, brown and measure $2-3.7 \times 1 \mu$. Conidia 2-celled, thick-walled, dark brown, faintly serrated, produced in basipetal chains of 2—4 spores, youngest being at the base; $7.4-11.1 \times 5.5 \mu$.

Maculae nigrescentes vel obscure brunneae, 1—10 mm diam.; mycelii hyphae septatae, ramulosae, superficiales, haustoriis $2-3 \mu$ latis tantum in epidermidis cellulas penetrantibus preeditae; conidiophora brevissima, continua, brunnea $2-3.7 \times 1 \mu$; conidia ellipsoidea vel ovoidea, medio septata, vix vel lenissime constricta, minutissime verruculose, concatenata, $7.4-11.1 \times 5.5 \mu$; episporio circumcirca aequaliter crassiusculo.

Leg. Alaka Chiplonkar, on dried phylloclades of *Muehlenbeckia*

platyclados Meissn. at Mahabaleshwar (India) on 30th October 1966.
M. A. C. S. No. 297 (Type).

Table I. Comparison of *Bispora* Species

Species	Conidiophores	Conidia	Authority
<i>Bispora monilioides</i> (Type species)	Sub-Conical, Stout.	20—22 × 6—7 μ	Corda,
<i>Bispora</i> sp. (Mahabaleshwar)	Peg like to slightly curved 2—3.7 × 1 μ.	7—12 × 5.5 μ	—

Comparison of this collection of *Bispora* with the type species shows significant differences in conidial dimensions and is therefore described as new species.

3. *Colletotrichum cryptostegiae* sp. nov. Chiplonkar (Fig. 3).

Infection spots dark black, scattered in porcelain white necrotic, marginal, irregular patches. Acervuli sub-cuticular, elongated, with basal layer of pseudoparenchyma, 112—256 μ.

Setae arise from the basal pseudoparenchymatous layer, scattered, 3 to 10 or more in one acervulus, light brown, rounded at the apex; 27—37 × 3.4 μ. Conidiophores simple, hyaline, non-septate, in parallel layers. Conidia one-celled, hyaline, oval; 11—15 × 3.7 μ.

Maculae dispersae, irregulares, obscure brunneae; acervuli sub-cuticulares, elongati, strato basali pseudoparenchymatico praediti, 112—256 μ diam.; setae marginales, e strato basali ortae, dispersae, plerumque 3—10 in quoque acervulo, pallide brunneae, 27—37 × 3.4 μ; conidiophora simplicia, hyalina, continua dense parallele stipata; conidia hyalina, continua, ovoidea, 11—15 × 3.7 μ.

Leg. Alaka Chiplonkar on leaves of *Cryptostegia grandiflora* Br. at Katraj (Near Poona, India) n 8th September 1966. M. A. C. S. No. 298 (Type).

This fungus has not been reported on this host previously and was found to be associated with an ascomycetous genus provisionally identified as species of *Didymella*.

Plants of *Cassia fistula* L., a common road-side and flowering tree, were found to exhibit severe type of follicular infection spots, brown in colour, during the monsoon of 1966 at Sinhagad (ht. approximately 4400 ft. above m. s. l.) near Poona (India). Diseased lesions revealed the presence of abundant acervuli with filiform to bent, hyaline, septate conidia, characteristic of the genus *Cylindrosporium*. Literature revealed that no species of *Cylindrosporium* has been reported on the host genus

Cassia. This species is compared with *C. padi* Karst., the type species, infecting leaves of *Prunus padi*, with the following result:

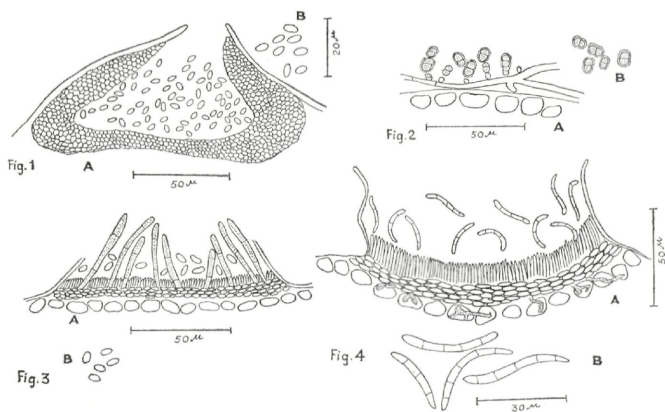


Fig. 1. *Phyllosticta flacourtiae* Chiplonkar. A. Pyrenidia. B. Conidia
Fig. 2. *Bispora muchlenbeckiae* Chiplonkar. A. Mycelium with conidia.

B. Conidiophores and Conidia

Fig. 3. *Colletotrichum cryptostegia* Chiplonkar. A. Acervulus. B. Conidia

Fig. 4. *Cyindrosporium cassiae* Chiplonkar. A. Acervulus. B. Conidia.

Table II. Comparison of *Cyindrosporium* Species

Species	Host	Acervuli	Conidia	Authority
<i>Cyindrosporium padi</i>	<i>Prunus padi</i>	Hypophyllous.	Filiform 48—66 × 2 µ	Karst
	<i>Cassia</i>	Amphigenous.	3—6 celled,	
<i>Cyindrosporium</i> sp. (Sinhagad)	<i>fistula</i>	160 × 160 µ (113—160 × 128—240 µ)	bent, 23.8 × 3.4 (16—34 × 3.4 µ)	—

It is evident from the comparative table, that the Poona collection of *Cyindrosporium* is significantly distinct in morphological characters as well as dimensions from the type species, and is therefore described as new to science with Latin diagnosis.

4. *Cyindrosporium cassiae* sp. nov. Chiplonkar (Fig. 4).

Infection spots pale brown, necrotic. Acervuli dark brown to black,

scattered sub-cuticular to sub-epidermal, amphigenous; $113-16 \times 128-240$ (mostly 160×160) μ in diameters. Conidia hyaline, septate, 3-6 celled, straight to bent, filiform, $16-34 \times 3.4$ (mostly 23.8×3.4 μ).

Maculae pallide brunneae, arescentes; acervuli obscure brunnei vel nigrescentes, amphigeni, subcuticulares vel subepidermales, $113-160 \times 128 \times 240$ μ , plerumque 160 μ diam.; conidia hyalina, 3-6-septata, recte vel curvula filiformia, $16-34 \times 3.4$ μ , plerumque 23.8×3.4 μ .

Leg. Alaka Chiplo nkar on the living leaves of *Cassia fistula* L. at Sinhagad (near Poona, India) on 18th Sept. 1866, M. A. C. S. No. 299 (Type).

The type material of all the four fungi has been deposited at C. M. I., Kew, Surrey; and I. A. R. I., New Delhi.

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References

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