

## A new species of *Cercospora* associated with the leaf spot of *Digitalis*.

By M. Sarwar and K. V. Srinath

Central Indian Medicinal Plants Organisation, Bangalore 11. (India).

With 3 Fig. in the text.

*Digitalis lanata* Ehrh. and *Digitalis purpurea* L. are the two species of *Digitalis*, grown at high altitudes in India and are known for their medicinal properties. The foliage of these plants contains about 1 per cent active glycosides in which digitoxin constitutes about 0.2–0.3 per cent. It is reputedly used for cardio-vascular and other allied diseases. CIMPO introduced both these species of *Digitalis* in its experimental farm at Kodimanchenahally near Bangalore in August 1961.

During January 1964, a leaf spot disease was noticed on *D. lanata*. The spots are brownish and are found near the apical region to begin with. They gradually increase in size and occupy half to entire portion of the leaf blade; the necrotic areas ultimately turn dark-brown finally causing the withering of the leaves. The infection is mostly on the outer leaves but in some instances, however, the inner leaves of the plant are also involved. The fungus which is possibly responsible for the blight of *Digitalis* is found to be a new species of *Cercospora*.

### *Cercospora digitalidis* Sarwar, M. Sp. nov.

Maculae primum brunneolae et plerumque e foliorum apice ortae, postea accrescentes et magnam folii partem occupantes, obscure brunneae, tandem expallescentes et plus minusve albescentes; mycelium ex hyphis subhyalinis, ramosis, septatis compositum; conidiophora 4–15 fasciculata, simplicia, 2–3-septata, pallide brunnea, recta vel leniter curvula, interdum etiam geniculata, antice obtusa vel subtruncata  $25.5\text{--}33 \times 3\text{--}4.5\ \mu$ ; conidia acrogena, singularia, angustissime obclavata, subhyalina, 3–7-septata, recta vel leniter curvula, postice truncata, antice acutiuscula,  $45\text{--}68 \times 3\text{--}3.7\ \mu$ .

Mycelium septate, branched, subhyaline; Conidiophore simple, 2–3 septate, 4–15 in each fascicle, subhyaline to pale-brown, straight or slightly curved, sometimes geniculate, tip obtuse or sub-truncate with a spore scar on it,  $25.5\text{--}33 \times 3\text{--}4.5\ \mu$ . Conidia borne singly and terminally, obclavate, subhyaline 3–7 septate, straight or slightly curved, base truncate, tip acute,  $45\text{--}68 \times 3\text{--}3.7\ \mu$ .

The type collected on living leaves of *Digitalis lanata* Ehrh., at the Experimental Farm of Central Indian Medicinal Plants Organi-

sation, Kodimanchenahally, Bangalore dated 26. 8. 1964, deposited in the herbarium of Commonwealth Mycological Institute, Kew, England, IMI. No. 109 479, in Herb. Mycol. Central College, Bangalore, No. 156 and in CIMPO. Herb. Bang. No. 124.

The fungus resembles *C. apii* Fresenius and *C. canescens* Ellis and Martin but the conidiophores and conidia of the species under report are much bigger than the above two and since speciation in *Cercospora* is largely based on the host, the fungus occurring on *D. lanata* Ehrh. is described here as a new species.

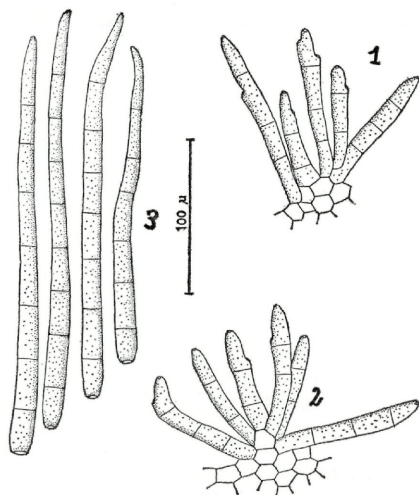


Fig. 1 and 2. Conidiophores of *Cercospora digitalidis* Sp. nov. — Fig. 3. Conidia.

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Autor(en)/Author(s): Sarwar M., Srinath K. V.

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