

Identity and Taxonomy of *Phyllachora mahabaleshwariensis* affecting *Embelia viridiflora*

By Alaka Chiplonkar

(M. A. C. S., Poona 4)

During her mycological survey carried out at Mahabaleshwar (elevation 4,500 ft.) near Poona (India) the writer came across plants of *Embelia viridiflora* Scheff. showing circular, orange-yellow coloured spots on the leaves. Microscopic examination of these spots revealed the ascomycetous nature of the fungus with the following characteristics.

Perithecia non-stromatic, pear-shaped, innate, ostiolate, wall-comprised of 2—4 layers of thin walled cells, clypeus absent 345—480 μ . Asci hyaline, cylindrical, paraphysate, wall gelatinising in water; 172—202 \times 8.5—13 μ . Ascospores 8, hyaline, monostichous, elliptical to oblong, one-celled; 13—16 \times 5.5—8.5 μ .

On the basis of these characters the fungus was indentified as a species of *Physalospora*.

Ananthanarayanan (1964) described *Phyllachora mahabaleshwariensis* parasitizing *E. viridiflora* collected by him from Mahabaleshwar from where also the writer's collection was made. Examination of type material of *Phyllachora mahabaleshwariensis* Ananth. obtained from M. A. C. S. Herbarium (M. A. C. S. No. 156) revealed the presence of infection spots studded with many black dots representing perithecia. The characteristic stromatic tarspots were absent. In section the perithecia were found to be innate, non-stromatic, with absence of clypeus, thus confirming the position of the type material under the genus *Physalospora* and not under *Phyllachora* as earlier determined by Ananthanarayanan (1964). The writer's collection was also found to agree in all respects with the type material. These two fungi are often liable to be confused but absence of stroma and clypeus and the innate character of the perithecia together with absence of tar-spots clearly differentiate this fungus from the genus *Phyllachora*.

In this connection it may be significant to note that a species of *Physalospora* has been described from Madras (India) by Ramakrishnan T. S. & K. Ramakrishnan (1951) under the name *Physalospora anamalaiensis* Ramk. T. S. & K. parasitizing a closely related host *Embelia ribies* Burm. Comparison of the writer's collection on *E. viridiflora* with the Madras species gave the following results.

The figures presented in the table show that the writer's collection

Fungus	Host	Perithecia	Asci	Ascospores
<i>Physalospora anamalaiensis</i> (Madras)	<i>E. ribies</i>	—	82—128 × 10—17 μ	10—17 × 7—14 μ
Mahabaleshwar collection	<i>E. viridiflora</i>	345—480 μ	172—202 × 8.5—13 μ	13—16 × 5.5—8.5 μ

differs from *P. anamalaiensis* Ramk. in having significantly bigger and thinner asci. On the basis of these distinctive characters, it is proposed to describe the writer's collection as a new variety of *Physalospora anamalaiensis* viz. *Ph. anamalaiensis* var. *mahabaleshwarensis* Var. nom. nov. Chipionkar and that *Phyllachora mahabaleshwarensis* Ananth. (1964) as a synonym of *Physalospora anamalaiensis* Ramk. var. *mahabaleshwarensis*. Chipionkar.

Acknowledgements

The writer is grateful to Prof. M. N. Kamat for his guidance and interest. Thanks are also due to Mr. A. V. Sathé of this Institute for his help.

References

- Ananthanarayanan, S. (1964). Studies in Indian Phyllachoraceae IV Sydowia Ann. Mycol. Ser. II 17; 216—217.
Ramakrishnan, T. S. & K. Ramakrishnan (1951). Additions to Fungi of Madras VII Proc. Indian Academy of Science 32 B, 67—79.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 1969/1970

Band/Volume: [23](#)

Autor(en)/Author(s): Chiplonkar Alaka

Artikel/Article: [Identity and Taxonomy of Phyllachora mahabaleshwariensis affecting Embelia viridiflora. 181-182](#)