

A new Species of *Colletotrichum* on *Gomphrena celosioides* Mart

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During the course of autecological studies on *Gomphrena celosioides* Mart. the author encountered fungal infection on leaves and stems of the plants growing in nature in Varanasi. The infected spots first appear as minute red circles enclosing black dots on the stems and leaves. At maturity these spots spread, with red coloured margins which are circular to irregular, enclosing a central ash coloured region which

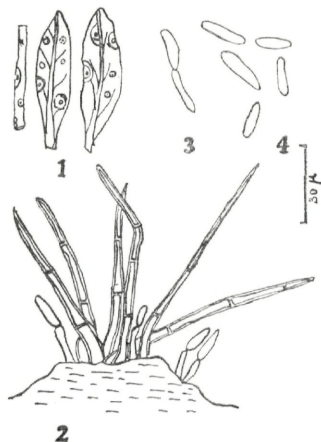


Fig. I. 1. Infected leaves and stem of *Gomphrena celosioides*. — 2. Transverse section of an acervulus showing setae, conidia and conidiophores. — 3 & 4. Individual conidia and conidiophore

bears acervuli as black dot-like structures. Spots often coalesce. At maturity they measure $2-8 \times 1.5-3$ mm (Fig. 1). When examined under the microscope the pathogen is found to be a species of *Colletotrichum* which has not been reported so far on this host.

As the characters of this fungus do not tally with any of the previously described species (Saccardo, 1931; Butler & Bisby, 1960), a new species is being created after the generic name of the host. The diagnostic characters of the fungus along with the Latin translation has been given below:

Colletotrichum gomphrenae sp. nov.

Maculae dispersae, minutae, orbiculares vel irregulares, in centro cinerascens et acervulis nigro-punctatae; acervuli superficiales, $32-112 \times 24-96 \mu$, setis plerumque $4-12$ nigro-virescentibus vel nigrescentibus, simplicibus, sursum paulatim attenuatis et plus minusve acuminatis, $46.62-106.56 \mu$ longis praediti; conidiophora hyalina, setis intermixtis, $9.99-23.31 \mu$ longa; conidia oocrogena, cylindracea, continua, recta vel lenissime curvula, $17.5-24.5 \times 3.5-4.2 \mu$.

Acervuli broad, superficial, varying from $32-112 \times 24-96 \mu$. Setae greenish black to black, simple, septate, tapering at the tip, $4-12$ in one acervulus, measuring $46.62-106.56 \mu$ in length, conidiophores hyaline, simple, short, straight interspersed with setae, varying from $9.99-23.31 \mu$ in length, bearing single conidium at their tips, conidia hyaline, single celled, cylindrical, rarely slightly curved, measuring $17.5-24.5 \times 3.5-4.2 \mu$.

Type specimen collected by A. K. Srivastava in Banaras Hindu University campus in September 1963 and is deposited in Crypt. Herb. Orient accession No. 28202, I.A.R.I.

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