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# CONIDIUM ONTOGENY OF *PHACIDIELLA VITICOLA*

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Dead twigs of *Vitis vinifera* bearing black fruiting bodies were collected during survey of Coelomycetes of Rajasthan. On examination it was found to be *Phacidiella viticola*.

**Keywords :** Coelomycetes; *Conidium ontogeny; Phacidiella viticola*; SEM.

During survey of Coelomycetes of Rajasthan, the authors collected dead twigs of *Vitis vinifera* L. bearing black fruiting bodies. On examination it was found to be *Phacidiella viticola*[1,2]. Detailed description and photomicrograph are presented. Microscopic character was studied from free hand section and conidiogenesis character from scanning electron microscope LEO 4355 VP. *P. viticola* Purohit and Chawla

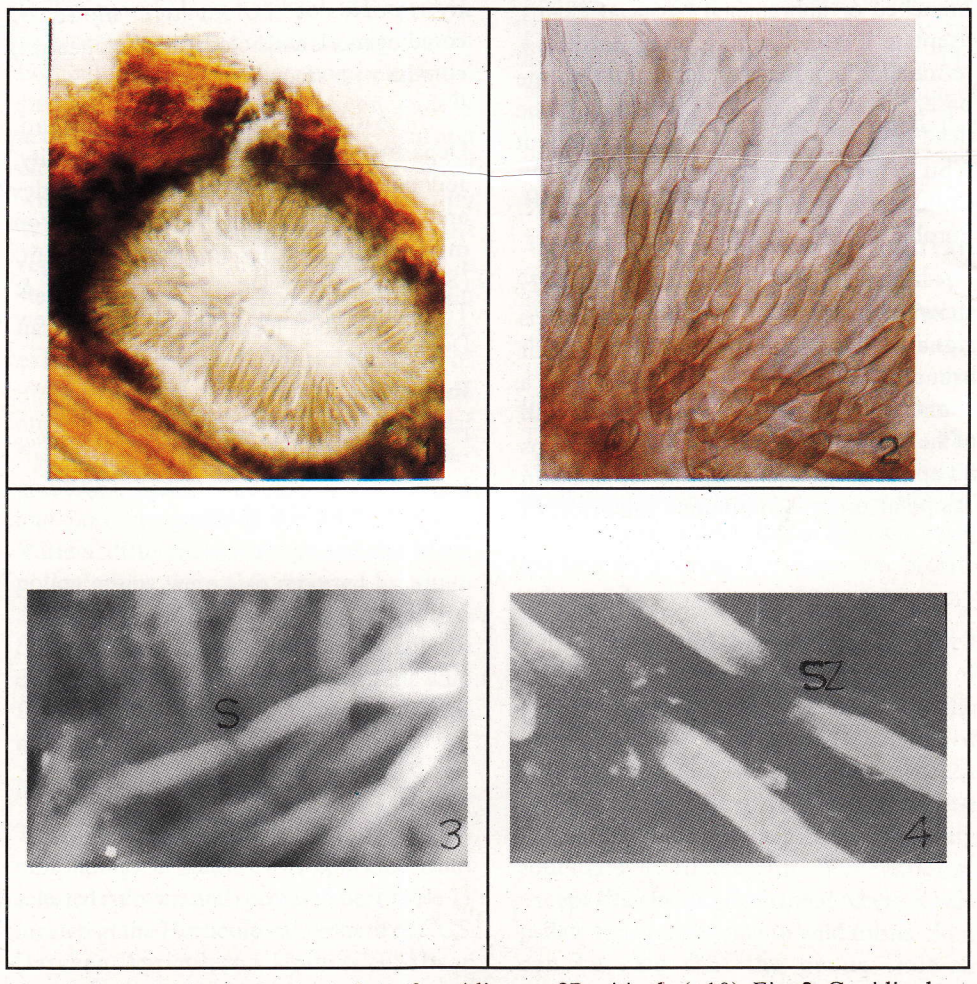


**Fig. 1-4.** Fig. 1. Transverse section of conidioma of P. viticola (x10). Fig. 2. Conidiophore and conidia of P. viticola (x10). Fig. 3. SEM of basipetal conidial chains of P. viticola (x5400). Fig. 4. SEM of holoarthric conidia of P. viticola with a constricted septum and smooth surface conidia (x6500).
S=Septum
SZ=Schizolytic secession.

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Conidiomata eustromatic, immersed, separate, rarely aggregated, peridermal, dark brown, at first globose, closed, later opening to become cupulate, lateral wall composed of layer of brown cells, thick walled and heavily pigmented outside, 560-580 µm diam. (Fig. 1) conidiophore hyaline, branched and septate at the base, smooth, cylindrical, Straight, 50-55µm. Conidiogenous cells cylindrical, holothallic, integrated, hyaline, smooth. Conidia in long branched or unbranched basipetal chains, aseptate hyaline, arthric, long doliiform, terminal with a rounded apex and truncate base, 8.1-10.8x2.7-3.0µm (Fig. 2). On the dead twigs of *Vitis vinifera* L. from Mount Abu. Date of collection 14.10.1998 Collected by Praveen Gehlot and Dr. D. K. Purohit.

Scanning electron microscopy study shows that initiation of conidiogenesis is signaled by differentiation of simple or branched conidiophores produced in a compact layers within the innermost wall of the conidiomata. Each conidiophore stops its apical growth and shows septation in basipetal order. Continuous septation of conidiophore results in the development of shorter segment. Each segment gradually exhibited swelling, become slightly enlarged and differentiated into a conidium. The differentiation and maturation of Conidia is associated with the centripetal schizolytic separation of septa and concomitant rupture of the hyphal wall layer leaving a circumscissile scar at the end of each conidium. Ultimately complete disarticulation results into scattering of conidium. Thus this species is characterized by thallic or holoarthric mode of conidiogenesis and holothallic (hologenous) conidia with smooth surface.

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