

*Niesslia* – A RARE ASCOMYCETES FUNGI FROM GHATANJI INDIA

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Abstract: The Present communication deals with *Niesslia* a rare ascomycetes fungi from Ghatnaji on different hosts viz. *Niesslia vidarbhia* sp. nov.

Keywords: *Ascomycetes*, *Niesslia ficalia* spp. nov., Perithecia, Ascus, Hyaline ascospore

Introduction:

Taxonomy is most important aid to understand the biodiversity and conservation, hence many fungal excursions were undertaken. Ghatnaji region is rich in fungal diversity. Some interesting and rare fungi viz. *Niesslia* included. On the basis of their taxonomic, cultural and host specific studies of the specimen proved to be distinct and treated as new species viz. *Niesslia ficalia* sp. nov. A brief mycotaxonomical description is given below.

Material and Methods:

The collected specimens were wrapped in butter paper and bagged in envelope. By taking hand sections, semi permanent microscopic slides were prepared by using cotton blue as stain, sections of the material were studied with the help of relevant keys and literature (Ainsworth et al 1973, Bhide et al 1987, Bilgrami et al 1979, Bilgrami et al 1991, Jamaluddin et al 2004, Sarbhoy et al 1996, Pandey 2008, Dmitry et al 2015).

Result and Discussion:

***Niesslia ficalia* sp. nov.** (Fig.1- a, b, c)
(Etymology: After host *Ficus Bengalensis*)

Perithecia globose to ovoid, superficial ostiolate, measure 429 x 231.0µm, provided with dark seate 4-6 in number, measure 49.5-132 x 6.6 µm ; asci ellipsoid, hyaline, bitunicate, 8-spored, pedicilate, measure 99-105.6x9.9-13.2µm; ascospores irregularly biseriatae hyaline, cylindric to fusoid one septate, measure 9.9-13.2 x 3.3µm.

Perithecia globosa, ovoidea, superficialia, ostiolata, magnit 429 x 231.0µm; ornate setis brunneis 4-6 magnit 49.5-132 x 6.6 µm µm; asci ellipsoidei, hyalinae, bitunicati, octospori, pedicellati 99-105.6x9.9-13.2µm; ascosporeae irregulariaae, biseriatae, hyalinae

vel pallide luteae, cylindraci vel fusoidae, uni-septati, magnit 9.9-13.2 x 3.3 µm.

Matrix: On dead leaves of *Fucus benghalensis* L (Fam:Moraceae) Legit MAS at Ghatnaji Dist. Yavatmal on 15/01/2004. AMH No.9126 (Holotype).

The comparative table 1 given below indicates that the species under study is having larger perithecia and asci than *N.exillis* (Albertini and Schweintiz ex Fries), *N.pusilla* (Fries) Schroeter and smaller ascospores as compared to *N.taiwanensis*, hence treated as new species.

Sathe and Mogarkar also reported the *N.ancardiae* from Chandrapur on dead leaves of *Anacardium occidentale* L. Ramachandra Rao reported the *N.muelleri* on same host from Aurangabad.

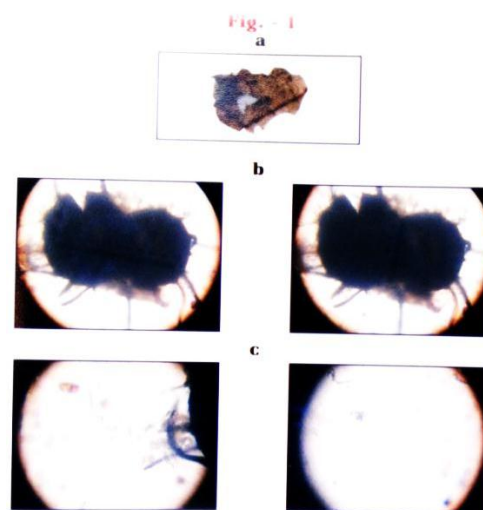


Illustration : *Niesslia* – A RARE ASCOMYCETES FUNGI FROM GHATANJI INDIA

Fig. 1 : (a) Habit (b) Perithecia (c) Ascus with ascospore.

Table-1 Comparative account of *N. ficalia* sp.nov. with related species

Species	Perithecia	Setae	Ascus	Ascospore	Reference
<i>N.muelleri</i> Rao R	90.0-150.0µm	90.0-155.0 X 7.0-9.0µm	30.0-40.0 X 6.0-8.0µm	6.0-8.0 X 1.5-2.4µm	R Rao (1966)
<i>N.ancardiae</i> Sathe & Mogarkar	150.0-200.0 X 140.0-180.0µm	100.0-130.0 X 10.0-12.0µm	40.0-60.0 X 8.0-11.0µm	8.0-10.0 X 2.0-4.0µm	Sathe & Mogarkar (1975)
<i>N.pusilla</i> (fries) Schroeter	150.0µm	50.0 X 4.0µm	40.0 X 5.0µm	9.0-11.0 X 2.0-2.5µm	Dennis (1981)
<i>N.exillis</i> (Albertini & Schweintiz ex Fries)	100.0-120.0µm	60.0-90.0 X 2.5-4.0µm	24.0-36.0 X 4.0-6.5µm	5.0-6.5 X 1.5-2.0µm	Sharma & Nema (1989)
<i>N.taiwanensis</i> Sivanesan & Hsieh	90.0-190.0 X 100.0-215.0µm	130.0-165.0 X 7.0-10.0µm	80.0-110.0 X 11.0-14.0µm	16.0-27.5 X 4.0-8.0µm	Sivanesan & Hsieh (1989)
<i>N.vidarbha</i> Dharkar	91.8-153.0 X 107.1-153.0µm	57.0-150.0 X 8.0-11.0µm	20.4-52.6 X 4.0-8.0µm	3.8-7.6 X 1.5-2.5µm	Dharkar (2011)
<i>N.pandanicola</i> Dulymamode et al	160-201	-15-2 um long	72-105x7-10	17.5-22.5x3.4µm	Dulymamode et al (2001)
<i>N.ficalia</i> sp.nov	431x231µm	49.5-132x6.6µm	99-105.6x9.9-13.2µm	9.9-13.2x3.3µm	Under study

The comparative table 1 given below indicates that the species under study is having larger perithecia and asci than *N.exillis*(Albertini and Schweintiz ex Fries), *N.pusilla* (Fries) Schroeter and smaller ascospores as compared to *N.taiwanensis*, hence treated as new species. Sathe and Mogarkar also reported the *N.ancardiae* from Chandrapur on dead leaves of *Anacardium occidentale* L.Ramachandra Rao reported the *N.muelleri* on same host from Aurangabad.

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