



Coffee leaf rust- #Indiafoldscopephase 1

SOUMITRA BANERJEE

READ REVIEWS

WRITE A REVIEW

CORRESPONDENCE:
sb5.foldscope@gmail.com

DATE RECEIVED:
December 06, 2018

© Banerjee This article is distributed under the terms of the [Creative Commons Attribution 4.0 International License](#), which permits unrestricted use, distribution, and redistribution in any medium, provided that the original author and source are credited.



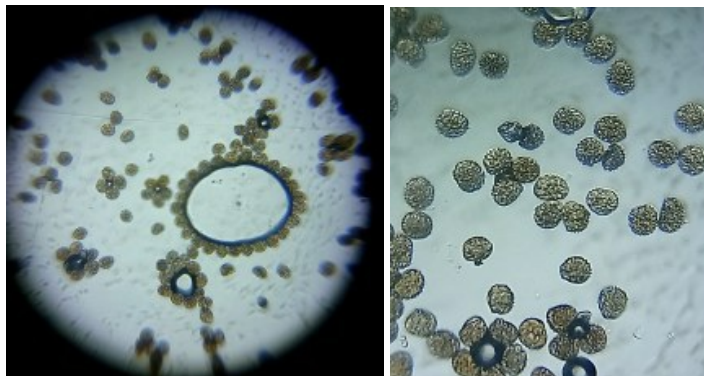
Diseased coffee leaves were collected from a local coffee plantation in Karnataka, India. There was small necrotic spots with yellow border on the upper surface and orange yellow coloured powdery mass on the lower surface of the leaf.



Fig (1): Diseased coffee leaves showing symptoms

It Is Coffee leaf rust. *Hemileia vastatrix* causes coffee leaf rust, the most important disease of coffee worldwide. The rust infects mainly leaves, but also young fruit and buds.

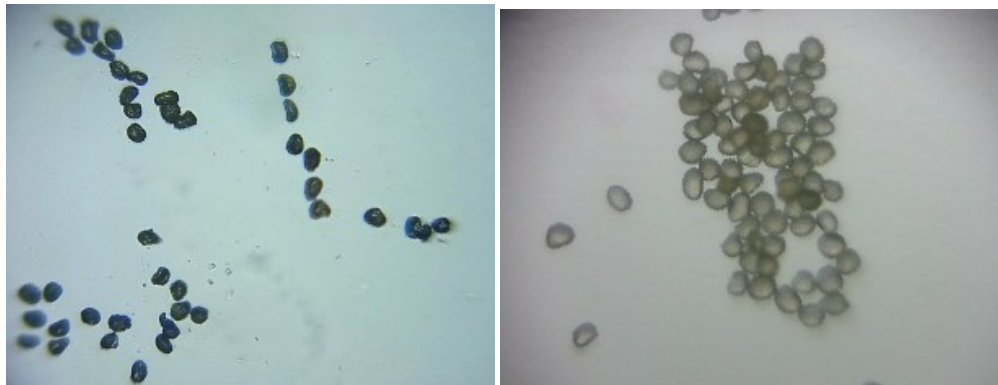
The spores found on the leaves were observed under foldscope and could able to observe both urediniospores and teliospores. Urediniospores found yellowish in color with thick walled and spherical in shape, while teliospores are relatively thin walled, blackish in color, smaller and kidney shaped under foldscope.



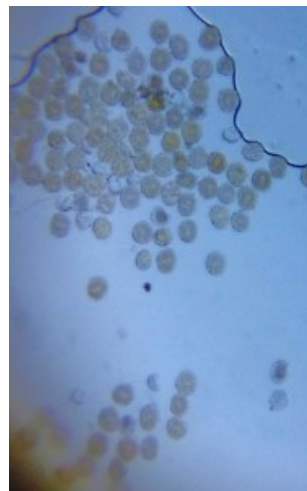


Fig(2):

Urediniospores observed under foldscope without diffuser(1 and 2) and with diffuser (3 and 4) and last image spores were stained with lactophenol cotton blue



Fig(3): Teliospores observed under foldscope without diffuser(1) and with diffuser (2)



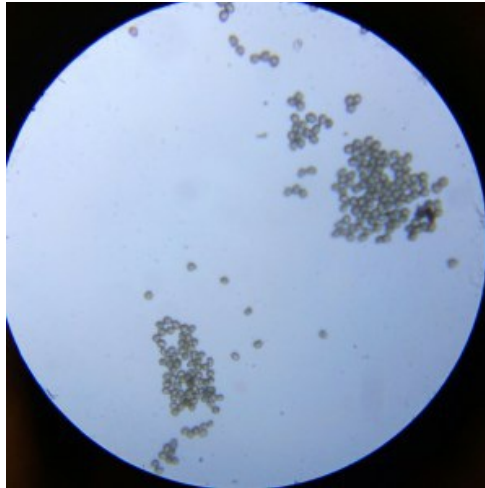
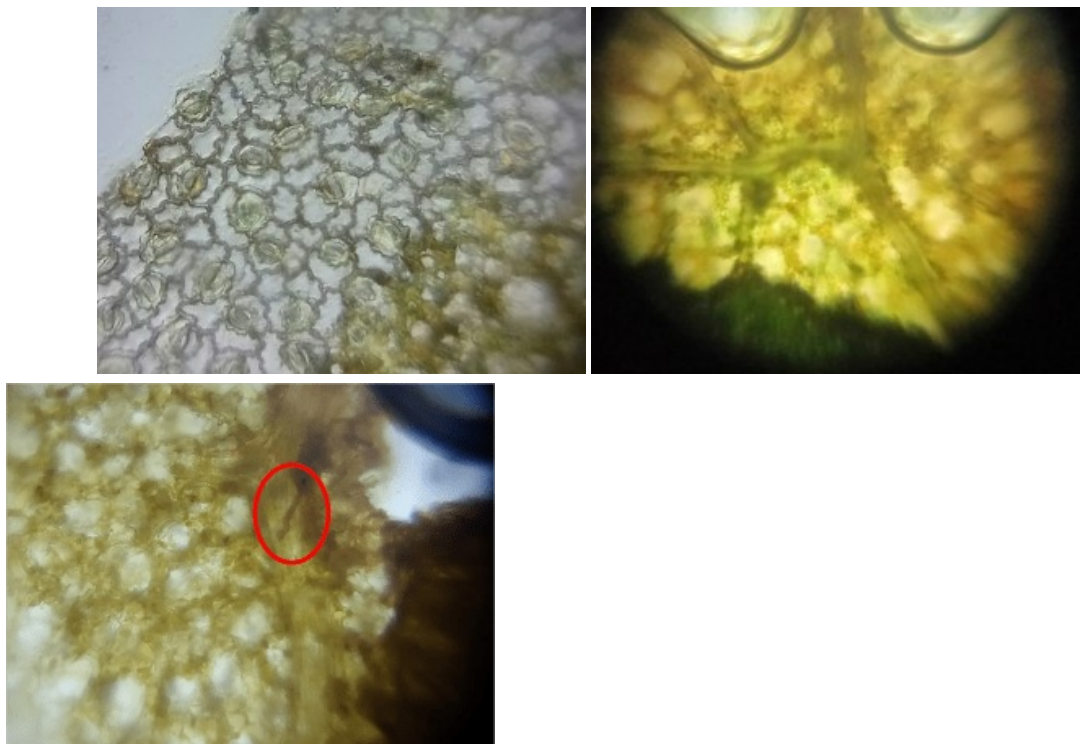


Fig (4): Urediniospores(1) and teliospores (2) observed under conventional bright field compound microscope



Fig(5): Diseased leaf section observed under foldscope, in last image(3) may be germinating teliospore we could observe