

**REPORT OF AN IMPERFECT RUST OF WHEAT FROM  
EAST PAKISTAN**

M. JALALUDDIN

*Department of Botany, University of Dacca, East Pakistan.*

The author collected wheat stems having elongated rusty pustules from the experimental farm of Agricultural Research Institute, Tejgaon, Dacca in February, 1969. On microscopic examination, a diseased stem of the specimen revealed new form of uredospores different from the type found on wheat plants in East Pakistan. In a T.S. of the stem, the single-celled sessile uredospores were found to be produced in definite cavities below the epidermal layer of the stem as shown in Fig. 1. The sessile uredospores remained crowded in cavities. The characteristic features of the uredospores is shown in a peeling of the rusty pustule in Fig. 2. The uredospores on the average measured  $23.5\mu$  in diameter.

Sathe (1969) has created a new form—genus *Peridiospora* for forms with peridiate uredia bearing sessile uredospores crowded in cavities following the taxonomy of imperfect rusts given by Laudon (1967). The genus *Peridiospora* has been reported parasitising a member of Boraginaceae, *Adelocaryum coelestinum* (Lindl.) Brand. But this fungal genus has not been so far reported on wheat. The present fungal parasite collected on wheat stems at Dacca is considered here to be a member of *Peridiospora*. Dr. Sivaneson has identified the pathogen to be an imperfect state of *Puccinia graminis* Pers. The new taxon on wheat will be described in future by the present author. The specimen of the rust has been deposited at C.M.I., Kew (141759).

I wish to thank Dr. Sivaneson of C.M.I., Kew, London for identifying the rust.

**References**

- Laudon, G.F. 1967. The Taxonomy of Imperfect Rusts. Trans. Br. Mycol. Soc. **50**(3): 349-353.
- Sathe, A.V. 1969. *Peridiospora*, a new form—genus of Uredinales. Trans. Br. Mycol. Soc. **53**(1): 143-145.

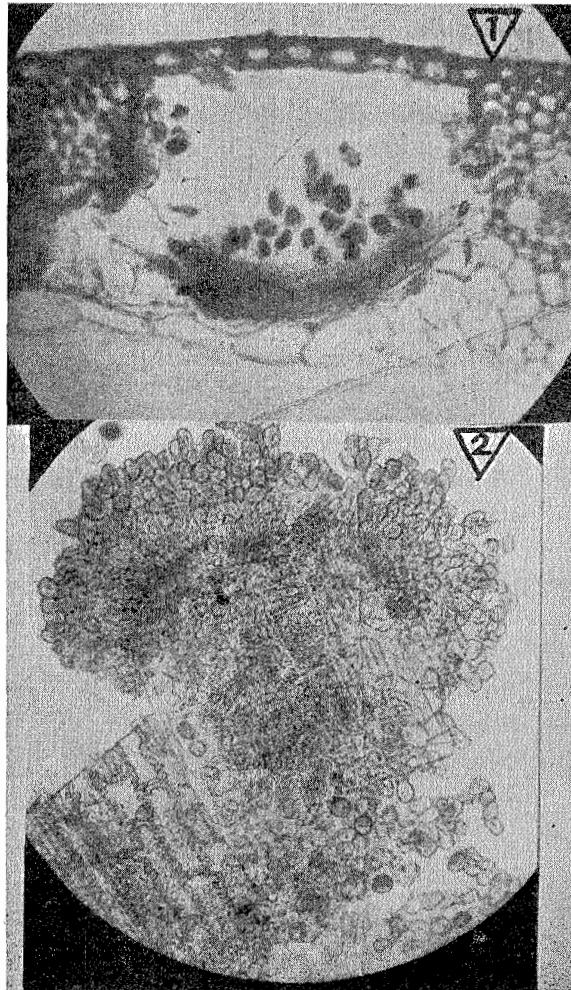


Fig. 1. Peridiate uredia bearing sessile uredospores.

Fig. 2. Crowded sessile uredospores as seen in a peeling of the epidermal layer of the host.