

A NEW RUST ON LOTUS spp. IN ARGENTINA

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The sign and symptoms characteristic of rust were found on disease plants of Lotus corniculatus L. and Lotus tenuis Waldst. et Kit., from provincia de Buenos Aires and kept in the Faculty of Agronomy, University of La Plata.

In spite of knowing the presence of this disease on several hosts from the Lotus genera in Rumania (Petrescu, 1926); United States (Arthur, 1934); Great Britain (Sampson and Western, 1942); Germany (Hey, 1945; Hartwich, 1955) and Norway (Jörstadt, 1948), this is the first record of a rust on Lotus spp. in Argentina.

SYMPTOMS

They are evident specially on leaves, but also on stems and leaf stalks.

The sign, main element for diagnostic, is represented by brown pustules, anfigenous, more abundantly in the abaxial surface of the leaves; circular and very small. On leaves: 0,1-0,5 mm of diameter. On stems and leaf stalks: bigger and elliptical, 1-2 mm long. The soros are erumpent, alone or in groups; increasing in number until they cover almost all the folioles surface. Finally this ones and the stems decay, and the whole plant dies.

PATHOGEN CHARACTERISTICS

The teliospore stage has not been observed yet, so only the urediniospores are described.

Uredinia are subepidermal in origin, erumpent. The urediniospores are globose or obovoid, borne singly on pedicels; pores 3-4 equatorial; wall 0,90-1 μ m thick, cinnamon-brown, epispore thin finely echinulate. Pedicel hyaline, sometimes persistent.

Dimensions: L. corniculatus 18, 75-26, 25 (21, 18) x 18, 75-22, 50 (20, 31) μm
L. tenuis 18, 75-28, 12 (22, 85) x 15-24, 37 (19, 86) μm

It is interesting to remark that the number of urediniospores on L. tenuis is fewer than in L. corniculatus. Also on the latter, mostly of the urediniospores are globose or spherical while on the former elliptical or obovoid.

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