

Fungal diseases on *Lotus* spp in Argentina.

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Diseases can limit persistence of *Lotus* spp. in production systems. Several pathogens are involved in a “disease complex”. Nevertheless, little is known about diseases and their impacts, both in the world and in Argentina. Fungal pathogens are the most prevalent organisms and according to the plant tissue they can affect, diseases are classified as follows (the references correspond to the diseases cited for Argentina):

Crown and root diseases:

They are considered chronic diseases, causing plant death and losses of 60 to 80 %. Typical symptoms are rot and wilt. The main Genus is *Fusarium* (*F. solani*, *F. oxysporum*, *F. verticillioides* and *F. equiseti*). (Teyssandier, 1976a; Dal Bello and Sisterna, 1992; Madia de Chaluat, 1994; Monterroso *et al.*, 1998; Juan *et al.*, 2000).

Stem and foliar diseases:

In contrast to crown and root diseases, foliar ones do not cause directly the plant death. They contribute to the progressive weakness of the plant through the effects on the basic metabolic processes. The reported pathogens are: *Phomopsis loti* (blight) (Teyssandier, 1976b; *Colletotrichum destructivum* (anthracnose) (Wolcan and Dal Bello, 1988; Monterroso *et al.*, 1998); *Stemphylium loti* and *S. spp.* (leaf spot) (Dal Bello and Wolcan, 1989; Monterroso *et al.*, 1998; Juan *et al.*, 2000); an unidentified rust (Dal Bello, 1986); *Uromyces loti* (rust) (Monterroso *et al.*, 1998; Juan *et al.*, 2000) and *Botrytis cinerea* (Monterroso *et al.*, 1998; Juan *et al.*, 2000).

Seed diseases:

They cause decrease in germination and damping-off. Fungi genera present in the seed are: *Alternaria*, *Aspergillus*, *Bipolaris*, *Botrytis*, *Cladosporium*, *Colletotrichum*, *Curvularia*, *Epicoccum*, *Fusarium*, *Leptosphaerulina*, *Penicillium*, *Phoma*, *Phomopsis*, *Stemphylium* and *Verticillum*. (Teyssandier, 1976a, b; Wolcan and Dal Bello, 1988; Dal Bello and Sisterna, 1992; Madia de Chaluat, 1994).

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