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SHORT REPORTS

The Early Dying Disease *(Verticillium wilt)* of Potato in Fars Province

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Potato *(Solamum tuberosum* L.) is widely planted in Fars Province. In July-September 1994, a survey conducted in 44 fields, indicated that potato plants were widely infected with *Verticillium albo- atrum* Reinke and Berthold, and *Verticillium dahliae* kled. This mixed infection allowed the isolation of both species in a number of samples. In a number of fields, *Fusarium solani* (Mart) sacc. was also isolated from the aerial parts of plants in addition to *Verticillium* species. The synergistic effects of both fungi revealed during pathogenicity tests that the early dying symptoms were more severe in plants inocultated with both fungi.

The early dying symptoms were observed as unilateral leaf chlorosis and necrosis followed by defoliation, stunting of the whole plant and vascular discoloration. The disease causes reduction of leaf surface area which in turn affects tuber size and yield.

Although the pathogen is mainly transmitted by contaminated soil adhered onto the surface of tubers, 22.8% of the tubers were assessed as internally infected by *Verticillium* species, and 4.5% by *F. solani.*

Uromyces vignae on *Vigna sinensis,* a new member for the Iranian rust flora.

M.ABBASI, Plant Pests and Diseases Research Institute.

During the study of the genus *Uromyces* on the family Fabaceae at the time of revision of herbarium specimens of *Uromyces appendiculatus,* it was revealed that one of

these specimens on *Vigna sinensis,* collected from Noshahr in 27., Oct. 1995 by Gh. Schrif, did not belong to *U. appendiculatus,* so it was assigned to *U. vignae* Barcl., according to following characteristics:

Uredinia amphigenous, cinnamon-brown; uredinospores obovoid or ellipsoid 22-30 x 18-23μm, wall 1-2μm thick, cinnamon-brown, echinulate and with 2 supraequatorial pores. Telia amphigenous, blackish-brown; teliospores ellipsoid 25-35x23-28μm; wall brown or dark chestnut-brown, smooth, 2-3μm thick.

U. vignae differs from *U. appendiculatus* in having uredinospores with 2 superequatorial pores.

U. vignae is widspread in many parts of the world on *Vigna sinensis*. Therefore it seems, the causal agent of cowpea rust in Iran is the same species. This is the first report of this rust species from Iran.

The First record on the occurrence of *Anoplocnemis curvipes* F. (Heteroptera, Coreidae) in Iran. ALI MORAD SARAFRAZI: Plant Pests and Diseases Research Institute.

During a survey in early March 1995, on mango trees in Siahou (Hormozgan Province), some coreids were observed feeding on tender shoots which identified as *Anoplocemis curvipes* F. It is 20-30 mm in legth. Antenna 4-segmented, dark brown, with the last segment lighter. Prontoum is sloped sharply toward its anterior. Its posterior corners are pointed. Sexual dimorphism can be seen in this bug. Hind femur is broadly expanded with a large spine in its innerside. The amount of expansion of the hind femur and the size of the spine in female is smaller than the male. A literature search revealed that this polyphagous species feeds on more than 100 plant species, such as mango, fig, cotton, okra, and citrus, belonging to more than 38 families, causing wilting and die-back of the shoots. The insect is commonly found in tropical regions and has recorded from somalia, Sudan, tropical and equatorial Africa and also from china, India, Ceylon, Sumatra, ... This is the first record of its occurrence in Iran.

The Report of *Nuculaspis abietis* (Schrank) from Mazandaran, Iran. M. ABAI. Plant Pests and Diseases Research Institute.

In may 1995 some samples consisting branches of norway spruce and blue spruce *(Picea abies* and *P. pungens)* collected from Klardasht nursery and infested with scales submitted to Research Department of Insects Ingurious to plants by Plant Medicine Bureau of Forests and Range lands Organization. Microscopic slides were prepared and accordong to following characteristics the insect identified as *Nuculaspis abietis* (Hemoptera: Diaspididae): Female scale ellipsoid and wide, the colour of central part dark and that of margins greyish, lenght of scale ranges from 1.7 to 2 mm. Male scale yellowish in colour, pear-shaped and measurs 1.3-1.6 mm. The pygidium circular, with 3 pairis of palpi (L1,L2,L3) the L3 ones longer than the others, somtines nodule-shaped. Plates situating between L1 a L2 widened.

According to litratures it is the first record of this scale from Iran, and being oligophagous its primary hosts are spruces, firs, *Pinus mugo , P. silvestris, P. nigra, Juniperus* sp. and *Pseudotsuga taxifolia.*

A Report on the Occurance of Entomopathogenic Nematodes in Iran. R. PARVIZI, SH. BAROUTI, H. ADLDOUST. West Azerbaijan Agricultural Research Centre, Plant Pests & Diseases Research Institute.

In the process of surveying entomopathogenic nematodes against cutworms infesting a variety of field crops in West Azerbaijan Province, a mermitid *(Mermis sp. Mermitidae)* was isolated from 23% of cutworm larvae collected in rainfed chickpea farms. Moreover, some other entomopathogenic nematodes were isolated from 4% of cutworm larvae in the rainfed fields of the region and subesquently transferred to Dr. Bedding in Australia, who diagnosed and named the isolates as *Steinernema anomali* (Steinernimatidae) and *Heterorhabditis bactriophora* (Heterorhabtidae). The latter was also isolated from full-grown poplar beetles *(Melasoma populi)* in the city of Khoi. Furthermore, around 150 soil samples from farms, orchards, and poplar plantations in the towns of khoi, Salmass, Miandoab, Shahindezh, Sardasht and Mackou were laboratory tested, and via

the Galleria-trap method entomopathogenic nematodes were isolated from 32% of the samples, 83% of which were *Heterorhabditis bacteriophora* and the other 16% *Steinernema anomali.* in preliminary tests, the larvae of related insects such as cutworms, pea *Heliothis*, cabbage butteriflies, apple bark beetles *(Scolytus mali)* the larvae, pupae and imagos of poplar beetles as well as 60% of white grub larvae *(Polyphila olivieri)*were infected by the above nematodes.