UDC 632.4:635.657

SPECIES DIVERSITY OF THE *FUSARIUM* PATHOGENS OF CHICKPEA ROOT ROT

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The species composition of Fusarium root rot pathogens of chickpea is defined. Eight species of fungi Fusarium Link are extracted and identified. The frequency of isolation of pathogens regarding to different phases of vegetation of culture is researched.

Chickpea, root rots, pathogens, Fusarium

Legumes are high in grain and forage balance of agriculture. They play a special role in the production of vegetable protein [7]. By this measure chickpeas (Cicer arietinum L.) ranks third in the world after soybeans and peas. Its seeds have high protein content (up 34%) and fat (4-7%) [6]. This culture has low growing conditions. However chickpeas are often amazed by phytopathogenic organisms that cause significant crop shortfall (60%) [10]. Among the pathogens characterized by widespread and lead to rotting of the root system of plants, a significant place belongs soil fungi [12]. At the same time, the complex soil pathogens its life products (mycotoxins) contaminating grain products, so that it is dangerous to use [3].

Depending on the pathogen following types of root rot legumes: afanomitsetna, Fusarium, ryzoktoniozna, and pitiyeva askohitozna basal [5]. Defeat chickpeas fungi of Fusarium Link., and types of Rhizoctonia solani Kuehn, Rh. bataticola (Taub.) Butler, Pythium ultimum Trow. Yet and P. aphanidermatum (Edson) Fitzp. registered in India [15] Poland [14], Spain [13], Pakistan [10] and other countries.

According to the literature of the above types of root rot on Nuti dominated by Fusarium root rot etiology, characterized by broad habitat and exhibit pathogenicity to plants 52 families 200 species quite difficult their control [1, 3].

In Ukraine lesser known chickpea root rot. About these are just some fragmentary information in the references. Therefore, continuous monitoring of disease chickpea root extraction and identification of pathogens is important.

The purpose of research - defining species composition of root rot pathogens of chickpea in terms NUBiP of Ukraine "Agronomy Research Station", as well as the frequency of isolation of pathogens depending on the phase of growth culture.

Materials and methods research. The objects of research were chickpea plants with typical symptoms of root rot. Field experiments were conducted in terms of the unit of the National University of Life and Environmental Sciences of Ukraine (NUBiP of Ukraine) "agronomic research station" Kyiv region. Sampling and analysis of samples was performed by the method of M. Kirik designed to determine the root rot of peas [4].

Isolation root rot pathogens were carried out under conditions in vitro in problem research laboratory "Mycology and Phytopathology" Phytopathology department named after VF Peresypkin NUBiP Ukraine. For this underground stems of affected plants were cut into pieces 1.5-2 cm in length and surface treated 96o alcohol (a few seconds). Then thoroughly disinfected particles washed in distilled water, znevodnyuvaly sterile filter paper and transferred to Petri dishes on potato agar.

At the optimum temperature for development of the fungus in 1-3 days developed mycelium, and the 7-10th - sporification. The identity of the remote fungi was performed 2 weeks after their cultivation on nutrient media, using morphological characteristics of species fungi of the genus Fusarium, presented in the works of VI Bilai [2] VV Kotova and others. [9] M. Stepanova et al. [8]. Objects photographed using a microscope LOMO MYKMED-5 HS 0594.

Conclusions

As a result of studies found that in a NUBiP of Ukraine "agronomic research station" Kyiv region in chickpea crops found Fusarium root rot etiology. Identified 8 species of fungi of the genus Fusarium Link. Among them, the greatest frequency of isolation characterized species Fusarium moniliforme Sheld. (48,9-43,2%) and Fusarium solani (Mart.) App. et Wr. (20,1-24,3%).

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