The Prevalence of Citrus Specific Nematode Tylenchulus semipenetrans Cobb 1913 on the Coast of the Black Sea in Georgia

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Abstract: The fight against dangerous nematode diseases that have world economic importance requires accurate data about the prevalence of these pests. In the point of view of the International Convention on Biological Diversity, the identification of the plant invasion causing dangerous pathogen in the early stages of invasion on new territory is the most important part of the program, which aims to monitor the Bio-Agro Coenosis and Bio-Control. Citrus nematode-specific belongs to the pathogen species, which can cause epiphytotics particularly for large areas and cause irreparable damage to citrus plantations. This paper provides a brief tour of the spread of citrus nematodes on the Black Sea coast (Adjara and Abkhazia). Also the bioecological monitoring data to detect the potential sources of invasion for evaluating the current conditions of the citrus nematodes prevalence. Through 2006-2010, the material was gained by structural monitoring system during the citrus vegetation period on tangerines, lemon and oranges from nine points of the study area. Mature forms of Tylenchulus semipenetrans Cobb, 1913 were observed in almost all of the samples of the root system, the peak of larvae was observed in late spring and outumn. 92 forms of nematode has been detected in the rhizosphere belonging to 8 Orders: Areolaimida, Dorylaimida, Enoplida, Mononchida, Tylenshida, Monshysterida, Rhabditida, Aphelenchida, 23 families and 40 genera. 75 forms are identified as species. It is estimated the number of nematodes fauna and ecological groups. To detect possible sources of invasion we obtained additional materials in 2013-2014 from citrus plantations planted in 2011, where is planted tangerine trees introduced from Spain and Japan. The fauna of rhizosphere is identified and Tylenchulus semipenetrans Cobb, 1913 is not detected.

Keywords: Citrus nematodes, infection, bioecological monitoring, epiphytotics

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