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PEST STATUS OF COLLECTIBLE PLANTS OF THE GENUS SYMPHORICARPOS DUHAMEL IN THE BOTANICAL GARDENS IN KIEV

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The plants of the genus *Symphoricarpos* Duhamel are very ornamental, winter- and drought-resistant species but they are rarely used in the landscape gardening in Kyiv. There are some snowberry collections in Kyiv – 6 species and 4 cultivars in M.M. Gryshko National Botanical Garden of the Academy of Sciences of Ukraine, 4 species in A.V. Fomin Botanical Garden of the Taras Schevchenko National University of Kyiv and 3 species in the Botanical Garden of National University of Life and Environmental Science of Ukraine.

For the purpose of determining the influence of the phytohelminths on the snowberries development in Kyiv collections we visually found plants with slow growth and development. The results of the further analysis showed that the decline of the snowberry plants was connected with the increasing of number of the parasitic nematode species in the plant rhizosphere, particularly phytohelminths.

Outer observation of snowberry collection was carried out during vegetative periods in 2010–2012; soil samples from 0–15 cm depth and from plant parts were taken two times – in spring (April) and autumn (September). During the observation we fixed the practically full stopping of growth, flowering and fruit bearing of some exemplars of *S. albus* (L.) S.F.Blake, *S. occidentalis* Hook, *S. rivularis*. The carrying out of the phytosanitary analysis (1, 2) of snowberry plantings for the purpose of finding the phytopathogenic helminthes in the surface and underground plant systems helped us to state that 10 stylet species and 7 saprozoic nematode forms (*Ditylenchus dipsaci* Filipyev., *D. destructor* Kiryanova, *Trichodorus sparsus* Szczygilep, *T. teres* Hooper, *Xiphinema diversicaudatum* Thorne, *Panagrolaimus rigidus* Thorne, *Tylenchorhynchus macrurus, T. dubius* Buetscli, *Pratylenchus penetrans* Filipyev., *Tylenchida* spp.) were found and identified from biological plant substrate. There were found and identified 6 stylet species and 4 saprozoic nematode forms in total number of 42 and 546 individuals accordingly in M.M. Gryshko National Botanical Garden of the Academy of Sciences of Ukraine from biological substrate of the snowberry plants; 4 stylet species and 6 saprozoic nematode forms in total number of 48 and 342 individuals accordingly in A.V. Fomin Botanical Garden of the Taras Schevchenko National University of Kyiv and 3 stylet species and 4 saprozoic nematode forms in total number 169 and 236 individuals accordingly in the Botanical Garden of National University of Life and Environmental Science of Ukraine.

Six species of cysts forming nematodes (*Heterodera avenae* Wollenweber, *H. rumicis* Poghossian, *H. shachtii* Scmidt, *H. carotae* Gones, *H. galeopsidis* Filipyev, *Heterodera* spp.) were found in root zone in snowberry collections of three Kyiv botanical gardens.

The results of the research confirmed that the decline of the plants' state was connected with the increasing of number of the parasitic nematodes, particularly phytohelminths. Usually the high accumulation of phytoparasitic nematodes can lead

to plants’ death in the future.