VIRUSES INFECTING ALLIUM SPP. IN SOUTHERN ITALY

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A survey for viruses infecting cultivated Allium species was carried out in southern Italy (Apulia, Calabria, and Sicily) by DAS- or TAS-ELISA (Barg et al., 1997), using antisera to Onion yellow dwarf virus (OYDV), Leek yellow stripe virus (LYSV), Garlic common latent virus (GarCLV), Shallot latent virus (SLV), Garlic virus C (GVC), and Garlic virus D (GVD), supplied by Drs. H. Lot (INRA, Montfavet, France), S.I. Sumi (Wakunaga Pharmaceutical Co., Hiroshima, Japan), and E. Barg (BBA, Braunschweig, Germany). Only a minority of the 120 garlic and the 25 onion samples examined came from plants that showed symptoms, i.e. reduced growth, chlorotic stripes, yellowing and curling of the leaves. Infection rates by potyviruses (OYDV and LYSV) were the highest, for OYDV was identified in 98% and 92% of garlic and onion samples, respectively, and LYSV in 83% of garlic samples, regardless of the geographic origin. Allexiviruses (GVC and GVD) were detected in all regions, their incidence ranging from 10 to 20%, depending on the viral species and the area. As to carlaviruses, GrCLV was identified in garlic samples from Apulia, with infections rates ranging from 23 to 98% in the southern and northern part of the region, respectively, whereas SLV was detected only in a few garlic samples from Calabria and Sicily.