DISEASE NOTE
FIRST REPORT OF GARLIC VIRUS A, B AND C IN GARLIC IN POLAND

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Garlic (Allium sativum) can be infected by many viruses, including members of the genus Allexivirus (Adams et al., 2011). A virus survey was conducted in eleven garlic fields located in different regions of Poland. Leaf and bulb samples from 80 plants showing mosaic, deformation and yellow stripes during the 2011-2012 growing season were tested by DAS-ELISA using antibodies to Garlic virus A (GarV-A), Garlic virus B (GarV-B) and Garlic virus C (GarV-C) supplied by the Leibniz Institute DSMZ-German Collection of Microorganisms and Cell Cultures (Braunschweig, Germany). Results indicated that 38 samples (47.5%) were infected with GarV-A, 49 samples (61.3%) with GarV-B and 14 samples (17.5%) with GarV-C. RT-PCR was used to confirm the occurrence of the three viruses in symptomatic garlic with total RNA extracted from the leaves of 20 DAS-ELISA-positive and five negative samples using the Spectrum™ plant total RNA kit (Sigma, USA), the Titan one tube RT-PCR system (Roche, Switzerland) and primer pairs designed in the conserved regions of ORF5 (coat protein) and ORF6 (nucleic acid binding protein) of GarV-A (ACPF/ACPR 5’-ATGTGCAATC-CACAATCGTCG-3’ and 5’-AGACCAATTGTGGTGCGGCCG-3’), GarV-B (BCPF/BCPR 5’-TGACGGGCAAACAGCA-GAATAA-3’ and 5’-ATATAGCTTAGCGGGTCCTTC-3’) and GarV-C (CCPF/CCPR 5’-TGCTACCAATGTTGTTTCC-3’ and 5’-TACTGGCAAGTGTTGGAAT-3’). Products of the expected size (444 bp for GarV-A, 576 bp for GarV-B and 679 bp for GarV-C) were amplified only from the DAS-ELISA-positive samples. RT-PCR was used to confirm the occurrence of the three viruses in symptomatic garlic.


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DISEASE NOTE
FIRST REPORT OF PURPLE SPOT DISEASE OF ASPARAGUS OFFICINALIS IN TURKEY

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In the course of a survey to determine the fungal pathogens of asparagus in Balıkesir province (north-western Turkey) brown sunken lesions with dark purple margins were observed on the spears. Pseudeothecia and ascospores were looked for in overwintering plant debris. Diseased tissues were surface-sterilized in 1% sodium hypochlorite for 2 min and placed on potato dextrose agar medium. The isolated fungus was identified as Stemphylium vesicarium based on morphological traits (Ellis, 1971), i.e. brown, oblong to broadly ellipsoidal and verruculose conidia (20 to 45×15 to 22 µm), with cross and longitudinal septa; pale to light brown conidiophores with a dark smooth or minutely verruculose band; bitunicate and clavate asci (190 to 150x25 to 33 µm); light brown and ellipsoidal ascospores (35 to 45×15 to 22 µm). The identification was confirmed comparing the sequence of a 544 bp product (accession No. JX397864) amplified from the ITS region of the fungus under study by PCR using the primers ITS1/4 (White et al., 1990) with that of a comparable region of S. vesicarium rDNA present in GenBank. Asparagus seedlings (45-day-old) were sprayed with a suspension of 5×10⁴ conidia/ml, then covered with polyethylene bags for 48 h and kept for 21 days at 22±1°C and a 14 h photoperiod. Symptoms comparable to those seen in the field were obtained and the fungus was consistently re-isolated from the lesions. S. vesicarium (telemorph, Pleospora bertharum), is an asparagus pathogen first recorded in the USA (Lacy, 1982). To our knowledge, this is the first report of asparagus purple spot disease in Turkey.