DISEASE NOTE

GONIAGNATHUS GUTTULINERVIS (KIRSCHBAUM), NEW NATURAL HOST OF THE STOLBUR SUBGROUP 16SrXII-A PHYTOPLASMA IN SARDINIA

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Grapevine yellows induced by phytoplasmas of the stolbur subgroup (16Sr XII-A) occur in Sardinia (Italy), sometimes with a fairly high incidence. In 2003, the average infection rate in cv Chardonnay was estimated to be around 17%. As infections are expanding locally in certain vineyards, epidemiological investigations were initiated to assess the presence and composition of the extant Auchenorrincha populations. Sweep net sampling was done every forthnight from May to November 2003 in diseased vineyards. Among the different leafhopper species that were captured, *Goniagnathus guttulinervis* was consistently present from August to November, with a peak of 53 adults in October. DNA was extracted according to Doyle and Doyle (1990) from samples collected in September and October, each made of five individuals, and amplified by one step PCR with universal primers R16F2/R16R2 followed by nested PCR with specific primers R16(I)F1/R16(I)R1. Amplicons were digested with the restriction endonuclease *MseI* and electrophoresed in 2% agarose gel. A phytoplasma of the subgroup 16SrXII-A (stolbur) was detected in two samples of seven collected in September but in none of the three samples collected in October. The identification of a seemingly novel natural host of stolbur phytoplasma, which adds to those known to be involved in the transmission of grapevine yellows (Boudon Padieu, 2003), opens new interesting epidemiological perpectives, which are now being investigated together with some molecular aspects.

Boudon-Padieu E., 2003.The situation of grapevine yellows and current research directions: distribution, diversity, vectors, diffusion and control. In: *Extended Abstracts 14th Meeting of ICVG, Locorotondo* 2003, 47-53.

Doyle J.J., Doyle J.L., 1990. Isolation of plant DNA from fresh tissue. *Focus* **12**: 13-15.

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FIRST REPORT OF *SQUASH MOSAIC VIRUS* IN TURKEY

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Widespread symptoms of a possible virus disease were repeatedly observed in melon crops (*Cucumis melo*) grown in the provinces of Mersin, Adana, and Urfa (south-west Turkey). Affected plants showed mild to chlorotic mottling of the leaves, deformation of the blades, and chlorotic patches on the fruits. A virus was consistenly recovered from symptomatic leaf samples from different areas by mechanical transmission to herbaceous hosts. Symptoms in inoculated melon seedlings were the same as those observed in the field. ELISA tests of leaf extracts from naturally and artificially infected melon plants gave positive reactions with two antisera to *Squash mosaic virus* (SqMV; genus *Comovirus*, family *Comoviridae*), supplied either by Dr. H. Lecoq (INRA, Montfavet, France) or a Turkish company (Lojistic). Since the seeds used to establish the crops had been imported from abroad and SqMV is known to be seed-borne, seeds from imported seed batches were obtained from the farms where the disease occurred. SqMV was consistently detected by ELISA in germinated seeds from all batches. SqMV has several strains for three of which (Kimble, Arizona and Melon) partial sequences are available (Hu *et al*., 1993; Haudenshield and Palukaitis, 1998). Strain-specific primers, designed by using Genbank sequences AF059533 (Kimble strain), AF059532 (Arizona strain), and M96148 (Melon strain), were used in PCR assays for amplifying reverse transcribed viral RNA extracted from diseased plants. Amplicons of the expected size (579 bp) were obtained only with primers specific to the Kimble strain. This is the first report of the occurrence of SqMV in Turkey, where it has probably been introduced with imported seeds.

Haudenshield J.S., Palukaitis P., 1998. Diversity among isolates of squash mosaic virus. *Journal of General Virology* **79**: 2331-2341.

Hu J.S., Pang S.Z., Nagpala P.G., Siemieniak D.R., Slighton J.L., Gonsalves D., 1993. The coat protein gene of squash mosaic virus, cloning, sequence analysis, and expression in tobacco protoplasts. *Archives of Virology* **130**:17-31.

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