

## CHARACTERIZATION OF XANTHOMONAS ARBORICOLA PV. JUGLANDIS ISOLATES IN HUNGARY

VÉGH Anita. (1), ATTILA Fodor. (1), BÉKÉSI Orsolya. (1), SZANI Zsolt. (2), BUJDOSÓ Géza. (3)

(1) Hungarian University of Agriculture and Life Sciences, Institute of Plant Protection, Budapest, HUNGARY; (2) National Food Chain Safety Office, Horticultural Breed Experimentation Department, Budapest, HUNGARY; (3) Hungarian University of Agriculture and Life Sciences, Research Center of Fruit Growing, Budapest, HUNGARY

#### Text

Xanthomonas arboricola pv. juglandis is the causal agent of walnut blight, the most important bacterial disease of Juglans species, which affects a high percentage of pistillate flowers and fruits, but does not kill bearing trees. Symptoms of the disease consist of dark brown to black spots on new leaves, stems and nuts. Many nuts fall prematurely; others reach full size, but their kernel become blackened, dried and wrinkled.

In Hungary, walnut blight disease occur and cause important damage in gardens and orchards. Since 2020, we have been constantly monitoring the symptoms. The collected leaf and fruits samples were decontaminated, homogenized and streaked on King B agar. After 24 hours of incubation at 26 °C the Gram property of isolates was determined by KOH test. We examined all isolates to induce a hypersensitive reaction on tobacco leaves. Biochemical API test was also used for identification. Finally, the pathogenicity of the isolates was checked. In the case of walnut blight, immature walnut fruits and leaves were artificial infected with a bacterial suspension. For molecular identification of the isolates, the 16S rDNA region were amplified using a universal primer pair (63F, 1389R). Xanthomonas arboricola pv. juglandis isolates that cause walnut blight disease have been identified by classical and molecular methods in Hungary.

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# FIRST REPORT OF PSEUDOMONAS SYRINGAE PV. SYRINGAE CAUSING A LEAF SPOT DISEASE ON WATERMELON PLANTS IN GREECE

GOUMAS Dimitrios. (1), MPALANTINAKI Evaggelia. (1), PAGOULATOU Marianthi. (1), MALLIARAKIS Dimitris. (1)

(1) Hellenic Mediterranean University, Heraklion, GREECE

### Text

In May 2022, a bacterial infection was found during microscopic examination, in watermelon seedlings, with symptoms differing from known watermelon bacterial diseases. The disease destroyed more than 3.000 plants at the nursery. On the leaves lamina, small oily, watery round spots were observed which grow in concentric rings and may merge. The spots acquire a brown necrotic center with a watery margin and/or a weak chlorotic halo. Similar elongated spots/cankers were observed on the stems, which may damage part or all the leaf lamina. From the infected tissues, on King's B medium, bacterial colonies were constantly