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Plant Protection Science

First report of *Pepper mild mottle virus* in pepper seeds produced in the Czech Republic – Short Communication

Svoboda J., Červená G., Rodová J., Jokeš M.:

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[fulltext]

Symptoms of viral infection were observed on plants of pepper, cv. OL 228, raised from commercial seeds of Czech origin in a greenhouse in the year 2002. Infected plants showed mosaic or mottling on leaves, and necrotic depressions on fruits. Straight, rod-shaped viral particles of about 300 nm, indicating a tobamovirus infection, were found by electron microscope. ELISA produced negative reactions for *Tobacco mosaic virus* (TMV) but positive reactions with an antiserum to *Pepper mild mottle virus* (PMMoV). In biological characterisation using pepper cultivars with the L1, L2, L3 and L4 tobamovirus resistance genes it was found that the Czech isolate of PMMoV belongs to pathotype P1.2. This is the first report of PMMoV in the Czech Republic. Its distribution, however, may still be limited as a survey did not reveal other infections

PMMoV spreads with infected seeds, the possibility of its chemical deactivation by NaOH was tested and confirmed.

Keywords:
Pepper mild mottle virus; characterisation; pathotype P1.2; *Capsicum annuum*; ELISA; electron microscopy; seed transmission; virus deactivation; sodium hydroxide

[fulltext]