

Research Paper

PATHOGENICITY OF *EUPROCTIS PSEUDOCONSPERSA* NUCLEOPOLYHEDROVIRUS TO MULBERRY SILKWORM

R. Murakami and K. Miyamoto

National Institute of Agrobiological Sciences, 1-2, Ohwashi, Tsukuba, Ibaraki 305-8634, Japan. E-mail:mritsuko@affrc.go.jp

ABSTRACT

Euproctis pseudoconspersa is a major pest of tea plants in East Asia and E. pseudoconspersa nucleopolyhedrovirs (EpNPV) has been used to control the pest. So far, there are no reports available on pathogenicity of EpNPV against silkworms or on differentiation of EpNPV and Bombyx mori nucleopolyhedrovirus (BmNPV) from silkworm. Hence, a study was conducted in this direction. There was no mortality in silkworms when injected with budded viruses (EpNPV). However, when EpNPV was per orally inoculated, mortality was noticed up to three days after inoculation. EpNPV was detected from the dead silkworms by polymerase chain reaction method using multiplex primers, and differentiated from BmNPV. The percentage of EpNPV detected from survived silkworms decreased in proportion to days elapsed after the ingestion.

Key words: Bombyx mori nucleopolyhedrovirus, Euproctis pseudoconspersa nucleopolyhedrovirus, silkworm.