

First report of the nuclear polyhedrosis virus in Tobacco budworm (*Chloridea virescens* F.) in the province Pinar del Río, Cuba

Primer informe del virus de la poliedrosis nuclear en el cogollero del tabaco (*Chloridea virescens* F.) en la provincia Pinar del Río, Cuba

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Dear Sir.

The tobacco budworm, *Chloridea* (= *Heliothis*) *virescens* (Fabricius) (Lepidoptera: Noctuidae), is the principal pest of the tobacco crop (*Nicotiana tabacum*, Lin.) in Cuba. It causes important damages that affect the quality and harvest of this crop annually.

In the 2014-2015 tobacco campaign, *C. virescens* larvae were collected in tobacco growing areas in Pinar del Río province and taken to the Entomology Laboratory of the National Center for Animal and Plant Health (CENSA) for morphological studies. They were placed individually in Petri dishes and fed with leaves of tobacco, cultivar Havana-92. The pupae formation and emergency of the adults were followed up. It was observed that the third and fourth instar larvae began to present slower movements, lack of appetite, a dark color tegument, the ventral area of the abdominal segments 1, 2 and 3 with a light green stain, and they finally became flabby.

The larvae with symptoms were collected and transferred to the Phytopathology Laboratory at CENSA for identification of the causal agent. Polyhedrons were extracted with a concentration of $0,7 \times 10^8$ polyhedra.ml⁻¹. This demonstrated an evidence of an infection by a Baculovirus species associated with the nuclear polyhedrosis virus (NPV). These viruses are widely used as effective bioinsecticides on species of the order Lepidoptera because of their high pathogenesis and specificity. For example, they have been used in the United States and South America to diminish early attacks and affectations of *C. virescens* in tobacco plantations and of *Spodoptera* spp. in other crops.

The presence of the NPV in *C. virescens* in Pinar del Río province is the first report of this virus in Cuba. Further studies on the NPV found are intended to be continued for identification of its species and completion of its biological and molecular characterization.

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