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Titel:

**Resistance evaluation of transgenic rice
with Cry1Ab to *Naranga aenescens* and
Chilo suppressalis (Lep.,: *Noctuidae* and
Pyrallidae)**

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Resistance Evaluation of Transgenic Rice with Cry1Ab to *Naranga anescens* and *Chilo suppressalis* (Lep, Noctuidae and Pyralidae)

Abstract

Recording to development of transgenic crops in the world and the increasing use of transgenic varieties. Khazar, Neda and Nemat varieties. Were studied for measuring their resistance to pests (*Naranga anescens* and *Chilo suppressalis*) in the Institute Rice Research were located in Amol city at 2008-2009 . Test methods were performed in greenhouse and laboratory. First and third larval instars of *Naranga anescens*, in laboratory (cut-leaf) and greenhouse and first and third larval instars *Chilo suppressalis* in laboratory (cut-stem) were studied to several days after the contaminated building. Rate of mortality and feeding of first and third larval instars of both insects, were significantly different between transgenic and control varieties. Mortality rate of first and third larval instars of both insects, reached about 100 percent in transgenic varieties, 4-6 days after the beginning of the contaminated building. However the rate of larval mortality was less than 10 percent in the control varieties at the same time. In addition, the amount of leaf feeding by *Naranga anescens* larvae (third- instar), during six days in control varieties in greenhouse was almost 40 times more than the transgenic varieties. morphological characteristics (height, tiller number) of transgenic varieties were not significantly different from control varieties . The results showed that transgenic rice had high levels of resistance against pest attack.

Key words: Resistance, Transgenic Rice, Cry1Ab , *Naranga anescens* , *Chilo suppressalis*