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DAYA PATOGENESITAS *Helicoverpa armigera Nuclear Polyhedrosis Virus* (HaNPV) SETELAH TERKENA RADIASI SINAR ULTRAVIOLET

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ABSTRACT

*This research is about the patho-gen capacity of the **Helicoverpa armigera** Nuclear Polyhedrosis Virus (HaNPV) after irradiation by the ultra violet (UV) light. The HaNPV is the one kind of the virus which attack the Insect Helicoverpa armigera - attacker the some species of the crop life tobacco, cotton, potato, tomato. Because of that the HaNPV can be used as the biological controle of the pest.*

Some researcher stated that the patogen capacity of the HaNPV is de-crease if the virus was exposed in the ul-tra violet (UV) light. Because of the fact the virus is not useful as the biological controle of the pest in the land crop. This research to test the statement.

Laboratory experimental was done to tested the patogen capacity of the HaNPV after irradiation treatment by the ultra violet light. The intensity of the UV light in this experiment were 28.7 lux, 97.3 lux and 127.4 lux with the lighting periode were 0, 1, 3, 6, 9, 12 and 15 hours.

The result of the research stated that the patogen capacity of the HaNPV was not influenced by the ultra violet light. So, the virus is still useful as the biological controle of the pest in the land crop.
Key words : Patogen capacity, HaNPV, Irradiation, UV light.

PENGANTAR

Helicoverpa armigera adalah suatu jenis serangga yang sangat merugikan. Pada fase ulat, *H. armigera* dapat menyerang beberapa jenis tanaman seperti jagung, tembakau, kapas, kentang, tomat, sorgum (Kalshoven, 1981). Di Indonesia *H. armigera* banyak menyerang tanaman jagung, tembakau, kentang, buncis, bunga matahari, bunga mawar, canthel, asparagus dan jarak (Sudarmo, 1987; Sison dan Shanower, 1994).

H. armigera menyerang tongkol jagung, sehingga rasanya tidak enak (Ruhendi dkk, 1985). Selain tongkol-nya, ulat ini juga menggerek bagian ujung tanaman jagung yang masih lunak (Anonim, 1980). Serangan hama ini di Indonesia tahun 1986 mencapai 52.182 Ha dengan intensitas serangan 16% (Purnomo, 1991). Pada tanaman kapas kerugian yang diderita mencapai 74,6% (Soebandrijo dkk., 1987).

H. armigera termasuk genus *Helicoverpa*, famili *Noctuidae*, Ordo Lepidoptera, Kelas Insekta (Esquera and Gabriel, 1969). Lama siklus hidupnya antara 31 - 47 hari (Karmawati, 1989), dengan lama fase ulat 13 - 21 hari (Kartono, 1989). Pada fase ngengat warnanya hijau kekuningan / coklat tua kehitaman / coklat muda. Tubuhnya