

Repellent and Insecticide Activity of *Pelargonium x hortorum* against *Spodoptera littoralis* (Boisd.)

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Insecticide and repellent activity of an acetone extract and oil from fresh leaves of *Pelargonium x hortorum* (cv. Orangesonne) were evaluated against the 2nd and 4th instar larvae of *Spodoptera littoralis* (Boisd.) (Lepidoptera: Noctuidae). The oil showed medium toxicity against the 2nd instar and low toxicity against the 4th instar larvae, while the extract showed high significant toxicity at all concentrations tested against the two instars. On the other hand, both oil and extract exhibited highly significant repellency against the two tested instars. Volatile constituents of the oil were also identified by GC-MS analysis.

Key words: *Pelargonium x hortorum*, *Spodoptera littoralis*, Oil