Current Nematology, **22**(1,2) : 49–53, 2011

Nematicidal activity of *Strychnos nuxvomica* leaf and its constituents against the *Radopholus similis* infesting black pepper (*Piper nigrum* L.)

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Received February 7, 2011 and Accepted July 20, 2011

ABSTRACT: Studies on the nematicidal activity of aqueous leaf extract of *Strychnos nuxvomica* and its constituents, brucine and strychnine against the burrowing nematode, *R. similis* tested *in vitro* and under green house condition. All three components showed nematicidal activity against *R. similis*. The cent per cent mortality was found at 200 ppm concentration of all tested components with in 24 h, whereas, lowest mortality recorded at 100 ppm. Among the three tested compounds, aqueous leaf extract showed maximum inhibition of the nematodes followed by brucine and strychnine. Maximum percentage reduces the *R. similis*, population when nematodes inoculated prior to treatment application followed by treatments apply prior to nematodes. Among the tested treatment, brucine (500 ppm) brought about cent per cent reduction of *R. similis* followed by leaf extract (98 %). Highest percentage of the plant length increase in brucine treated plants (306 %) than leaf extract (290 %) and maximum percentage increase of the leaf in 250 ppm concentration of leaf extract (290 %) treated plant, followed by strychnine (250 %).

Key Words: Nematicidal activity, *Strychnos nuxvomica* , *Radopholus similis.*

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