

TRICHODORUS TERES A VECTOR OF RATTLE VIRUS¹

Trichodorus teres, vector van het ratelvirus

H. A. VAN HOOFF

Institute of Phytopathological Research (I.P.O.), Wageningen

In previous papers (SOL & SEINHORST, 1961; VAN HOOFF, 1962), it was shown that *Trichodorus pachydermus* can transmit rattle virus (RV) and pea early browning virus (PEBV) in the Netherlands. As was shown by HARRISON (1963) *T. viruliferus* transmits PEBV in England and we found (VAN HOOFF, 1964) that this species is also a vector of RV. We therefore thought it worthwhile to test *T. teres*, another vector of PEBV in the Netherlands (VAN HOOFF, 1962), for its capacity to transmit RV. The following experiment was performed. Full-grown *T. teres* were isolated and placed on the roots of four healthy 'White Burley' tobacco plants (100 on each plant) for two weeks. At the end of this period the tobacco roots were tested for the presence of RV, but none of them proved to be infected. In the soil of the pots in which the living nematodes were still present other 'White Burley' tobacco plants were planted. Four days later these plants were inoculated with RV. Two weeks after this inoculation the nematodes were isolated from the soil. The larvae produced during the course of the experiment were separated from the full-grown nematodes, and these larvae and the adult nematodes were tested separately for their virus-transmitting capacity on 'White Burley' tobacco seedlings.

Out of seven groups of full-grown nematodes (91 in total) tested, four infected the plants with RV, whereas out of seven groups of larvae (167 in total) two caused infection with the RV. From these data it may be concluded that RV can also be transmitted by *T. teres*.

SAMENVATTING

Exemplaren van *Trichodorus teres* bleken ratelvirus te kunnen overbrengen, nadat ze gedurende 14 dagen op met dit virus besmette 'White Burley' tabak waren gehouden.

REFERENCES

- HARRISON, B. D., - 1963. Rothamsted Exp. Station. Report for 1962.
 HOOFF, H. A. VAN, - 1962. *Trichodorus pachydermus* and *T. teres* vectors of the early browning virus of peas. Tijdschr. PlZiekt. 68: 391-396.
 HOOFF, H. A. VAN, - 1964. Serial transmission of rattle virus by a single male of *Trichodorus pachydermus* Seinhorst. Nematologica 10: 141-144.
 SOL, H. H. & J. W. SEINHORST, - 1961. The transmission of rattle virus by *Trichodorus pachydermus*. Tijdschr. PlZiekt. 67: 307-309.

¹ Accepted for publication 3 September, 1964.