

FIRST RECORD OF *XIPHINEMA RIVESI* ASSOCIATED WITH GRAPE VINES IN WESTERN AUSTRALIA

S.B. Sharma¹, S. McKirdy¹, A. Mackie and F. Lamberti²

¹ Western Australia Department of Agriculture, Baron Hay Court, South Pert, WA 6151 Australia

² Istituto per la Protezione delle Piante, Sezione di Bari, C.N.R., Via Amendola 165/A, 70126 Bari, Italy

In January 2001, leaves of a number of grapevines cv. Cabernet Sauvignon were found to exhibit symptoms of strong chlorosis with shortening of internodes. The vines were growing in the Albany area of the Great Southern Region of Western Australia. The symptoms were initially thought to be due to infection of an unidentified nepovirus; however, generic and specific nepovirus PCR and ELISA tests were negative. Soil samples collected from this vineyard revealed that a population of a dagger nematode species (*Xiphinema* sp.) was predominant. Based on detailed morphometric measurements the dagger nematode species was identified as *Xiphinema rivesi* Dalmasso. Juveniles of a root-knot nematode species (*Meloidogyne* sp.) were present in low numbers.

Xiphinema rivesi is known to be a vector of the nepovirus cherry rasp leaf, tobacco ringspot and tomato ringspot (Taylor and Brown, 1997). Originally described from France (Dalmasso, 1969), it is now reported from Europe (Bulgaria, France, Germany, Portugal), North, Central and South America, and Asia (Pakistan) (Lamberti *et al.*, 2000). It is the most widespread species of the *X. americanum* group in North America (Robbins, 1993). This is the first report of this species for Australia, however there are many records of *Xiphinema* sp. from vineyards across the country. Western Australia is an important region of Australia for production of wine grapes, table grapes, and dried vine fruit. Viticulture is now predominant horticultural industry in Western Australia contributing 10-12% of Australia's premium – ultra premium bottled wine and it is predicted to increase fourfold in the next seven years. There has been

very little work undertaken to identify the species of nematodes present in Western Australia vineyards with most records only to genus level. There is a need to survey these vineyards to identify the potentially damaging nematode species and to characterise the relationship between nematode density and vine damage.

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