

Thousand canker disease moves south of the northern Apennines

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Thousand canker disease (TCD) is a serious disease of walnut native to North America, caused by the fungus *Geosmithia morbida* M. Kolařík, E. Freeland, C. Utley & N. Tisserat (Ascomycota, Hypocreales) and its insect vector *Pityophthorus juglandis* Blackman (Coleoptera, Curculionidae). Italy is the only country where this insect/fungal disease complex has been found outside the North American continent, having been reported starting from 2013 in the Veneto region, and later in neighbouring areas. Given the economic importance of walnut cultivation in central and southern Italy, a field survey was carried out to ascertain the possible occurrence of the disease also in Tuscany. This survey led to the discovery of a disease outbreak in the province of Florence in 2018. More than 7000 *P. juglandis* individuals caught in two traps during the growing season indicated a massive occurrence of the vector. The fungus was isolated and identified from insect adults and larvae, as well as from cankers around entry holes and galleries. The finding is of prime importance because it is the first report of TCD south of the natural mountain barrier represented by the northern Apennines, into areas where the cultivation of walnut is both ecologically and economically important. The thermo-hygrometric requirements of both causal organisms suggest that climate is not a limiting factor for the establishment of the disease in the southern EPPO region. This insect/fungal interaction, if left unmanaged, has the potential to cause serious damage to both the important native *Juglans regia* and the introduced *Juglans nigra*.