Incidence of spherical mealybug *Nipaecoccus viridis* (Newstead) on medicinal plant *Tinospora cordifolia*

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The infestation of the spherical mealybug, *Nipaecoccus viridis* was recorded for first time on Amruthaballi (*Tinospora cordifolia*, Family: Menispermaceae) at the Indian Institute of Horticultural Research, Bangalore. Thick clusters of cotton like masses were seen on leaves and vines. The pest population ranged at an average of 10 – 12 mealy bugs per leaf. The infested leaves showed symptoms of chlorosis on leaves and drying. The honeydew excretion was heavy, attracted ants and served as a medium for sooty mould development.

There are no confirmed reports of *Nipaecoccus viridis* infesting *Tinospora cordifolia* which is an important medicinal plant of the Indian systems of medicine and is being used since times immemorial. The other pests recorded on *Tinospora cordifolia* are leaf hopper, mites and leaf folders which are minor, occasional, and polyphagous (Ramanna *et al.*, 2010). Incidence of *Nipaecoccus viridis* was recorded on other medicinal crops viz., *Leucas aspera*, *Mimosa pudica* and *Phyllanthus emblica* (Vijay and Suresh, 2013). This pest was recorded on *Nerium oleander* (Varshney, 1992; Ben-Dov, 1994; Williams, 2004), *Embelica officinalis* and *Leucas aspera* (Williams, 2004) *Abrus precatorius* (Ben-Dov, 1994).

The spherical mealybug, *Nipaecoccus viridis* (Hemiptera: Pseudococcidae) is native to Asia and widespread throughout the tropics and subtropics. Being a polyphagous pest, it is known to attack hosts in more than 35 different plant families like Euphorbiaceae, Fabaceae, Myrtaceae, Leguminaceae, Vitaceae, Rubiaceae, Malvaeeae, Tiliaceae, Verbenaceae, Anacardeceae, Liliaceae and Solanaceae (Ben-Dov *et al.*, 2010). Although the origin is uncertain, *N. viridis* is known to be widespread throughout Africa and Asia (CABI, 2007). It has been intercepted at US ports on Lythraceae, Sapindaceae, Myrtaceae and Rutaceae. In Okinawa, it is a significant pest on mango (Kinjo *et al.* 1996) and is a serious pest of citrus in South Africa (Hatting, 1993). It is a significant pest of multiple economic crops, including tropical fruits, citrus, avocados, soybeans, cotton, and ornamentals.

It was first described from India as *Dactylopius viridis* by Newstead (Newstead, 1894). *N. viridis* has been reported to cause up to 5% damage in vineyards in Bangalore, India (Mani and Thontadarya, 1987). In India, it is sporadic but often severe pest on jack fruit (Mani and
Krishnamoorthy, 1997). *Nipaecoccus viridis* is major menace on tamarind in south India where it is common on many fruit trees and ornamental plants (Morton, 1987). Though *N. viridis* has been recorded in India on different crops, the reports on its distribution, host range and extent of damage is unconfirmed. As *N. viridis* is a potential pest with wide host range, studies on management aspects needs further investigation.

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**References:**

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