



Figure 1. a, Nerocila sigani on its host Terapon theraps Cuvier. b, Enlarged view of (a).

Subsequently, Bruce and Harrison-Nelson² recorded this isopod from six different hosts belonging to three families, viz. *Sciaenia dussumieri*, *Argyrosoma hololepidotus*, *A. macrocephalus*, *A. nibe* (Sciaenidae), *Parastromateus niger* (Carangidae) and *Pomadasys* sp. (Pomadasydae). They found this species to occur in *P. niger* in Tamil Nadu, India (exact locality not cited). In 2001, Kensley³ also reported this isopod from Gujarat coast (34–37 fathoms) and Andaman Sea without supplementing any host record.

While surveying 'mangrove fauna of Odisha coast' during April 2011, we came across this species at Paradip Fishing Harbour. The parasite was observed to occur on the fish *Terapon theraps* Cuvier (locally known as 'Kunkunia'). It

was found attached to the base of the caudal fin of the fish (Figure 1). A total of nine specimens were collected, of which, eight specimens were without any host and were all females. The nonovigerous females varied from 17.0 to 25.0 mm in length and 9.0 to 19.0 mm in breadth. The ovigerous female studied was 18.0 mm in length and 17.0 mm in breadth. The single male specimen measured 16.0 mm in length and 6.0 mm in breadth. The present report of this parasite from T. theraps is a new host record for this fish. With this, the distribution of the parasite is further extended up to Odisha coast of eastern India.

The specimens examined agree in general with the description of Bowman and Tareen¹, differing only in pleotelson

which is about as long as breadth in the specimens examined (versus pleotelson about one-third wider than long). Serration of exopod of uropod is deep in the lateral margin. Faint serrations are also observed in the inner margin.

N. sigani is a widely distributed species of the Indo-Pacific region being recorded from South Africa, the Persian Gulf, Red Sea, Madagascar, Sri Lanka, Malay Peninsula (Penang) and Taiwan.

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Present status of eucalyptus gall insect, *Leptocybe invasa* (Fisher and LaSalle) in Tamil Nadu

The spread of invasive alien species (IAS) is recognized as one of the greatest threats to the ecological and economic well-being of a country. They cause enormous damage to biodiversity and the valuable natural ecosystems on which we depend. In the recent past, many alien species of insects have invaded India affecting forest, agricultural and horticultural production. Scientific management of these has not been fully understood. The eucalyptus gall wasp, Leptocybe invasa (Fisher and LaSalle) (Hymenoptera: Eulophidae) is one such species that warrants scientific study. Eucalyptus gall insect problem has been reported from several parts of India¹⁻⁴. The insect forms galls on the leaf midrib, petioles and stems of seedlings and saplings as well as coppice shoots, young coppice

and nurseries resulting in the stunting of growth⁵. Galls induced by this wasp can also cause severe injury to young trees and may seriously weaken them. The Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore undertook extensive surveys in the eucalyptus plantations in Tamil Nadu during 2007-2009 to assess the extent of infestation by the pest. In order to enhance productivity, many paper companies and farmers are planting high-yielding clones. Many eucalyptus plantations containing the clone C10 have been abandoned since it was considered as the most susceptible clone, which farmers prefer to grow for more biomass.

Adoption of classical biological control mechanism kept the population of gall wasp under check. When an alien

pest is accidentally introduced and established in a new area, it is usually without the complex of natural enemies that control it in its native location. It is generally considered that some of the most effective natural enemies of an organism are those that have co-evolved with it in its native habitat. Therefore, some of the most dramatic successes in biological control have resulted from importing natural enemies from other countries, a practice often called classical biological control. Nevertheless, there are reports on the existence of gall wasp menace in some parts of Tamil Nadu. In order to monitor the spread of the pest and the damage caused, a survey was undertaken in different eucalyptus-growing tracts, particularly in the areas of Tamil Nadu Forest Development Corporation





Figure 1. a, Eucalyptus gall on the clone C283. b, Eucalyptus gall wasp emerged holes on midrib.

(TAFCORN) at Karaikudi, Aranthangi, Pudhukottai, plantations of Tamil Nadu Newsprint and Papers Limited (TNPL), and farm forestry areas at Kanchipuram, Chenglepet, Sriperampudhur, Madurai, Sivagangai and Kovilpatti areas since July 2012. The eucalyptus clones, C10, C3, C7, C274, C283, C226 and C413 were planted in the aforementioned areas. Of these clones, clone C10 of a 6year-old plantation at Karaikudi was found to be the most susceptible for gall incidence. Hence, further propagation and planting of C10 was stopped by TAFCORN. Clones C283 and C7 were heavily infested by gall wasp (100%) at Sivagangai. Clones C3 and C7 were also infested by the gall insect, when clone C10 was planted adjacent to them. It was concluded from the survey that the gall incidence is not totally contained in the state, as some areas are still ravaged by the gall wasp. Continuous monitoring in both nurseries and young plantations for the incidence of the gall insect at regular intervals is essential to effectively manage the pest.

Currently, no specific management strategies against *L. invasa* exist. Some of the ad hoc measures include periodic monitoring of infested nurseries and plantations, mechanical removal and avoiding use of susceptible clones. When the pest incidence is low, selective pruning or plucking of leaves or shoots, application of systemic insecticides such as dimethoate or oxydemeton methyl (2 ml/l) or imidacloprid (1 ml/l) at fortnightly intervals and strict quarantine have also been suggested. Two Eulophide parasitoids native to Israel, namely *Quadrastichus mendeli* Kim and LaSalle,

and *Selitrichodes kryceri* Kim and LaSalle were found to be effective in reducing the *L. invasa* population.

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Hypertension

Tension tension hypertension
Silent killer causes major tension
Why and when you don't know
But one fine day you come to know
That your beats are crazy and you feel
dizzy

Systole and diastole behave very crazy What went wrong you may be thinking Stress, high salt, alcohol – keeps tinkering

Its never too late to get yourself checked To protect yourself from the silent killer Beware of your beats and stop the feast To live healthy and happily ever after. World celebrates World Health Day on 7 April 2013, and the focus of this year is on 'hypertension'. Hypertension is a silent killer (http://www.cdc.gov/nchs/fastats/hyprtens.htm). According to a report by CDC, Atlanta, 50 million cases of hypertension are being reported to physicians each year. The multifactorial cause of this disease makes it more complicated. Moreover, hypertension is linked to other serious disorders, multiple organ failure, etc. WHO 2002 reported hypertension as the major factor for disability-adjusted life years. It has been estimated

that 1.56 billion people will suffer from hypertension by the year 2025 (ref. 1).

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