Biological control of Eucalyptus gall wasp, *Leptocybe invasa* Fisher & La Salle (Hymenoptera: Eulophidae) by its native parasitoids

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**ABSTRACT:** Utilization of native parasitoids \textit{viz.} *Megastigmus dharwadicus* Narendran and Vastrad (Hymenoptera: Torymidae) and *Aprostocetus gala* Walker (Hymenoptera: Eulophidae) for biological control of eucalyptus gall wasp, *Leptocybe invasa* Fisher and LaSalle (Hymenoptera: Eulophidae) is reported. Two native parasitoids multiplied in the greenhouse were released in a severely affected eucalyptus plantation spread over an area of 1000 ha. A total of 14,000 heavily parasitized galled seedlings, 1400 *M. dharwadicus* and 300 *A. gala* were distributed over a period of six months. The per cent parasitization by these native parasitoids was ascertained before distribution of galled seedlings. Though there was a gradual increase in per cent parasitization, the reduction in gall incidence was not evident up to three months. However, drastic reduction in gall incidence and pest emergence accompanied by very high per cent parasitization was evident within eight months. Post release evaluation conducted during June 2011 and May 2012 indicated the successful control of the pest. © 2015 Association for Advancement of Entomology

**Key Words:** Biological control, Native parasitoids, Eucalyptus gall wasp, *Leptocybe invasa*, *Megastigmus dharwadicus*, *Aprostocetus gala*

**INTRODUCTION**

Since its first report from the Middle East during 2000, the Eucalyptus gall wasp, *Leptocybe invasa* Fisher & La Salle has rapidly spread to other areas throughout the world (Aquino \textit{et al.}, 2011; Aytar, 2006; Branco \textit{et al.}, 2006; Dhahri \textit{et al.}, 2010; Gaskill \textit{et al.}, 2009; Karunaratne \textit{et al.}, 2010; Kim \textit{et al.}, 2008; Mendel \textit{et al.}, 2004; Mutitu, 2003; Nyeko, 2005; Wiley, 2008). In India it was first reported during 2001 from Karnataka (Anon, 2007) which subsequently

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