(Lepidoptera: Arctiidae); *Ageratina adenophora* by *Procecidochares utilis* (Diptera: Tephritidae); submerged aquatic weeds such as *Vallisneria* spp. (Hydrocharitaceae) and *H. verticillata* in fish ponds by grass carp. Singh (2004) concluded maximum degree of success by classical biological control agents in India has been of aquatic weeds (55.5%) followed by homopterous pests (46.7%) of crop pests and terrestrial weeds (23.8%).

Prospects of biological control of weeds

There are many biological control agents which have been introduced in other countries and have shown varying degrees of success through combined effects. In Australia, 11 biological control agents have been introduced against *P. hysterophorus* alone. Such successful biological control agents need to be introduced in India against some of the problematic weeds like *P. hysterophorus*, *E. carassipes*, *P. stratiotes*, *Alternanthera philoxeroides* (Amaranthaceae) etc.

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Prospects of biological control of major invasive alien weeds in forest ecosystems in India

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Invasive alien plant species that are non-native to a country or a specific ecosystem, which are introduced purposely or accidently into a newer environment heavily colonize the invaded habitats in the absence of natural enemies and adversely affect the functioning of that ecosystem. Their introduction to or invasion of forest ecosystems importantly protected and environmentally sensitive areas impose enormous economic loss or damage in terms of ecological destruction and detriment to wildlife and human health. India is one of those countries invaded by many noxious invasive alien weeds over a century and half. Spread and severity of these weeds in agricultural lands and in different forest ecosystems, in particular in the protected areas of Western Ghats and rain forests of north-eastern states has become serious in the recent times, causing environmental concerns. India is rich in biodiversity and has wide range of bio-geographical zones with varied climatic conditions. There are about 500 wildlife sanctuaries, 90 national parks and 13 biosphere reserves. Nearly 1800 plant species are known as alien to India. Of which species such as *Lantana camara* (Verbenaceae), *Mikania micrantha* (Asteraceae), *Chromolaena odorata* (Asteraceae) and *Mimosa pudica* (Fabaceae) are of social, economic and environmental importance as they have invaded many wildlife preserves and natural forests.

These invasive weeds are also known to be dangerous in teak, eucalypts and coffee plantations in this country as they severely affect the establishment and growth of the young plantations and also reported to have allelopathic effect, inhibiting the growth of the native vegetation. Though the bad effects and the threat posed by these weeds to the environment have been talked about and highlighted much on number of occasions, no serious attempt has been made to look at the problems related to these alien invasive species and to plan for sustained and effective management strategies. While mechanical and chemical methods of management of these species are suggested by many researchers, except for some preliminary attempts to introduce selective biological control agents against these invasives, no systematic and concerted efforts are made to tests and make use of the proven biological control strategies available elsewhere. This paper emphasizes the need for a focused, coordinated and sustained effort at the national level to explore the possibilities of importing, testing and introduction of the proven biological control agents. Importance of climate matching in successful introduction and establishment of the biocontrol agents is also highlighted in the paper.