Using the Atlas of Living Australia to support weed biological control

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Summary Farmers, natural resource managers, community volunteers and others contribute to weed biological control efforts by identifying infestations suitable for biological control, releasing biological control agents, monitoring biological control agent release sites, and recording field observations of agents as they spread across the landscape. However, significant barriers can prevent data being captured, shared and used. Maintaining and accessing long-term monitoring data is particularly difficult. The Atlas of Living Australia (ALA) is a national on-line biodiversity database that has potential to address these barriers. The ALA contains more than 70 million user-submitted species occurrence records from field observations, collections and surveys. Data such as location coordinates, photographs, and species and host information, can be uploaded and later accessed in spreadsheets or species distribution maps. This resource has tremendous potential for biological control, as it can be used to:

1. record biological control agent release and establishment data;
2. capture observations of biological control agent spread;
3. ensure biological control agent distribution data is readily accessible, and
4. provide a one-stop shop for biological control extension material.

A custom-made app for iPhone and Android devices further facilitates the collection of data from the field. The Atlas of Living Australia, combined with smartphone technology and a custom-made app, has potential to transform the assessment of biological control agent establishment and spread, and facilitate adoption of biological control by end-users.