



Scotch and Illyrian Thistle Update

Harden Murrumburrah Landcare is holding an information field morning to update farmers on the progress of the Scotch and Illyrian Thistle biocontrol. The morning will be addressed by Anthony Swirkepek, CSIRO Entomology, held at Bobbara, Galong on 11 December 2000, 8.30 am start with *Larinus latus* (seed eater) and *Cardui Linux* (stem borer) will be available for collection by attendees.

Since 1992 CSIRO have made 198 releases of the seed-feeding weevil *Larinus lotus* as a biocontrol agent against Scotch and Illyrian thistle. In the early stages of the release process *Larinus* proved to be difficult to establish until we decided to stop releasing in cages and move to free-releases. Since then the rate of establishment has increased from 10% to 90%. *Larinus* has also been observed to spread 10's of kilometres from release sites. While this hasn't resulted in high attack rates where the weevils have spread it is very encouraging for the future and has led to a decision being taken to reduce the release effort

The presence/absence of the seed-feeding weevil may be determined from mid November through to December. Simply visit a thistle infestation and look for the adults feeding or laying eggs on flowering plants or damage to the leaves by the stem borer, tends to be circular and not eaten completely through. You may even find this damage without having released the weevils on your farm; the project has found weevils have traveled large distances from release sites. Louise Hufton commented that a large number of farmers are ringing and reporting a high infestation of stem borers and seeing significant damage and stagnation in thistle growth this year.

What about results! Our monitoring indicates that at selected field sites seed-feeder attack has reached a level high enough to reduce seed production by up to 30%. Of course this isn't happening on every plant at every site but it is an encouraging start.

So you've had releases of the stem borer and the seed feeder for a year or two now and you'd like to know when you're going to get the next agent.

To date CSIRO have made releases of the petiole moth *Eublemma amoena* at 15 sites and releases of the crown weevil *Trichosirocalus* sp. nov at 3 sites. At this stage CSIRO will be relying on insects from their rearing cultures for releases of *Eublemma* rather than field collection for redistribution as there is no obvious stage of the moths life cycle that lends itself to field collection. Because of this releases will be restricted to approximately 10/year. Releases of the crown weevil will be both from field collection and rearing cultures. For 2000/2001 releases will be restricted to approximately 5/year as the 3 field sites have been slower to build to collectable levels than hoped.

The crown weevil and the crown moth will initially require release sites separate from each other, as they feed in similar parts of the plant. It is OK to release them at sites where the stem borer and/or the seed feeder are established. The main requirement will be a high density of *Onopordum* rosettes within the fenced area for the release of these species.

If you are not currently involved with this project and would like to be please do not hesitate to contact Louise Hufton, HMLG Coordinator 63868218