



PESTFACTS South-Eastern



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PestFacts is a free service designed to keep you informed about invertebrate pest-related issues - and solutions - as they emerge during the winter growing season. The service is supported by the GRDC's National Invertebrate Pest Initiative, with a focus on pests of broad-acre grain crops in south-eastern Australia.

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LITTLE PASTURE COCKCHAFERS

Little pasture cockchafer beetles (*Australaphodius frenchi*) have been identified for consultant, Sandy Biddulph (Biddulph Rural Consulting), from a canola crop south of Cootamundra, in the South West Slopes district of New South Wales. Sandy reports finding up to 10 beetles per metre row along with scalloped cotyledons and a few plants with just a stem remaining. We have also identified little pasture cockchafer beetles for research officer, Geoff Davis (AgriTech), and agronomist, Ian Pursehouse (Landmark), who have both collected samples from canola crops around Young, in the South West Slopes district of New South Wales. In recent weeks, little pasture cockchafer beetles have also been observed in several paddocks in South Australia and Western Australia. In previous years high numbers of little pasture cockchafer beetles have been observed in canola crops in the Wimmera and Western Districts of Victoria.

Little pasture cockchafers are elongated black coloured beetles, approximately 3-4 mm in length. They have striations down their back and can be confused with various dung beetles. They belong to the Family Scarabaeidae and are found in New South Wales, South Australia, Tasmania, Victoria and Western Australia. Despite the numerous reports of this species, we have still not been able to definitively attribute any crop damage to the little pasture cockchafer as they have not been observed feeding directly on crop plants.

Only a small amount is known about the biology and feeding habits of the little pasture cockchafer, although they are not reported to feed on living plant material. Adults and larvae are believed to be coprophagous: consuming and redigesting animal dung. Paddocks where high numbers of these beetles have been sighted should be closely monitored to better



understand the situation and to help ascertain the pest status of the little pasture cockchafer. The crops in question have typically all been canola sown into paddocks with a strong pasture history.

BROWN PASTURE LOOPERS

[Brown pasture loopers](#) (*Ciampa arietaria*) have been identified for agronomist, Matt McLoughlan (JSA Independent), damaging a lupin crop near Charlton, in the Wimmera district of Victoria. The paddock was a cereal in 2009 and the damage is confined to a small patch within the middle of the paddock. Matt reported the leaves within the affected area were substantially damaged and that caterpillars could be found on the surrounding ground and directly on the lupin plants. Brown pasture loopers have also been identified for agronomist, Elissa Strong (Walkers AGnVET Services). Elissa says significant feeding damage has occurred to several lucerne paddocks south of Forbes, in the Central West Slopes and Plains district of New South Wales. At least one paddock has required chemical control.

We have observed brown pasture loopers in a recently sown canola crop containing medic and capeweed, near Charlton, in the Wimmera district of Victoria. We have also received an unconfirmed report of small brown pasture looper caterpillars attacking an emerging canola crop west of Skipton, in the Western district of Victoria.

Brown pasture loopers attack canola and lupin crops, as well as pastures and broadleaved weeds. They have one generation per year and are generally present from July to October. They are most damaging when large sized caterpillars (>20 mm in length) transfer from autumn weeds onto newly emerged seedlings. Brown pasture loopers are often prevalent around patches of weeds, particularly capeweed, and around the edges of crops. These areas should be monitored closely and spot or perimeter spraying is often all that is required.

Caterpillars of the brown pasture looper vary in size, growing to 20-35 mm in length. They move using a series of back arches, which results in a characteristic looping motion. Caterpillars are dark brown to grey in colour with a yellow line along the back either side of a conspicuous dark band. They have red spots surrounding the breathing holes (spiracles) on the sides of the body. Moths are pale dusty brown in colour with grey and brown streaks on the forewings.

Click [here](#) for images of the brown pasture looper.

COWPEA APHIDS

Agronomist, Brett Aitkin (Landmark), reported [cowpea aphids](#) (*Aphis craccivora*) on seedling faba beans and vetch crops around Warracknabeal, in the Wimmera district of Victoria. Brett says most crops in the area contain some aphids, with a few paddocks under attack from very high numbers. In the worst affected crops, aphids are present on every plant and beginning to form colonies. The higher than usual numbers of aphids seen across many regions in the past few months could result in large, damaging populations that peak in late winter and early spring. Growers are encouraged to keep a close eye on all crops, particularly pulses and medics from late winter onwards.

Agronomist, Andrew Newall (NEWAG Consulting), reports that cowpea aphids are commonly being found in various legume crops in the Wimmera district of Victoria, particularly around Horsham. Crops treated with an insecticide seed dressing prior to sowing have few or no aphids. In contrast, Andrew says many of the untreated crops have aphids present and will be



sprayed to reduce the risk of plant virus transmission, which was a significant problem in many legume crops in 2009.

The cowpea aphid is easily distinguished from other crop aphids. Adults are shiny black, up to 2 mm long and may have wings ('alate' forms). Nymphs are smaller and dull grey in colour. All stages have white and black coloured legs. Cowpea aphids favour legume hosts and are commonly found on faba beans, lentils, medic, lucerne, clover and lupins. Click [here](#) for images of cowpea aphids.

Cowpea aphids form dense colonies on individual plants, or in well-defined patches. Infestations start on the growing tips, and spread down the stem, causing leaf bunching and stem twisting. They also produce honeydew, which can lead to the formation of a black sooty mould and reduce plant growth. Cowpea aphids can cause severe damage in moisture stressed crops. Cowpea aphids are also known to be vectors of many important plant viruses.

SLATERS

Agronomist, Matt Sheppard (IMAG Consulting), has reported slaters attacking an emerging canola crop at Forbes, in the Central West Slopes and Plains district of New South Wales. Matt says up to 10-15 slaters were found per metre row, and when searching at night they were observed directly feeding on canola plants. The damage consisted of chewing through the plant stems as well as damage to some cotyledons. The affected paddock has a heavy load of stubble and will require re-sowing due to the extent of feeding damage. Agronomist, Natalie Thornton (Elders), has reported problems with slaters attacking wheat seedlings near Inverleigh, in the Western district of Victoria. In recent weeks, high numbers of slaters have also been reported by other agronomists from numerous paddocks across the Western district of Victoria.

Although slaters have not previously been considered a pest of broad-acre crops within Australia, it is best to keep an eye on them. In the past few years, there have been isolated cases where slaters have caused damage to crops in New South Wales and Victoria. Feeding results in uneven rasping-type damage that often appears as 'windows' of transparent leaf membrane. Contrary to common belief, slaters are crustaceans, not insects. They have a hard skeleton on the outside of their bodies and many pairs of jointed legs.

Slaters are known to be a minor pest in South Africa, where they often attack lupin and canola crops. They are generally controlled via cultivation but problems have worsened under minimum-tillage. Peter Mangano (DAFWA) has recently received reports of slaters damaging canola plants in the south of Western Australia. Problems appear to have occurred in paddocks containing a large amount of stubble. Peter says crumbly clay soil surfaces and cracking clays seem to favour the survival of slaters.

One particular species, the 'flood bug' (*Australiodillo bifrons*), has caused significant damage to cereal crops around Moree and Mudgee in northern New South Wales. The flood bug is a native species, approximately 7-8 mm in length and 4 mm wide. They are oval shaped and have a flattened body, with light coloured legs. They have the unusual behaviour of moving in 'swarms' which can consist of >100,000 individuals. The slater species observed by Matt is not the flood bug, but is a species that is more closely related to the commonly found introduced garden slater, *Porcellio scaber*.

There are no insecticides registered against slaters in broad-acre crops, and reports indicate they are relatively unaffected by most foliar applications of both synthetic pyrethroids and organophosphates applied to control other crop establishment pests, even when applied at



very high rates. This is probably because they hide under cover and avoid sufficient contact with the insecticide. There are chemical baits registered for use against slaters in horticulture, and reports suggest some success with chlorpyrifos baits in Western Australia.

Click [here](#) for further information on slaters and for images of the flood bug click [here](#).

MANDALOTUS WEEVIL

Mandalotus weevils (*Mandalotus* spp.) have been identified for customer service manager, John Ellis (AGnVET Services). The weevils have caused extensive damage to a monola crop near Henty, in the South West Slopes district of New South Wales. Very high numbers of weevils were found across the paddock and entire areas have been completely bared out. John says the paddock will need to be re-sown due to the extent of damage. In 2009, this paddock was sown to oats. Mandalotus weevils have also been recently identified in samples from a lupin paddock near Lake Bolac, in the Western district of Victoria, and a canola paddock near Young, in the South West Slopes district of New South Wales.

Adult Mandalotus weevils are 3-5 mm in length and have a rounded, dull brown coloured body, which can easily be mistaken for a small clod of dirt. They are known to attack canola, cereals, beans and medic pastures. Adults actively feed during the night, whilst during the day they can be found hiding under clods of dirt and trash. Feeding damage is usually first noticed on the leaves of emerging crop plants. In severe cases the seedlings are often 'ring barked' just above ground level. This causes the plants to fall to the ground where the weevils continue feeding on the leaves. Click [here](#) for images of Mandalotus weevils.

Little is known about the biology of Mandalotus weevils. They were first recognised as a significant pest in 2003 in the Mallee district of South Australia. The distribution and host range of Mandalotus weevils appear to have expanded in southern Australia in the past few years and population increases are probably the result of minimum tillage and stubble retention, which create a more favourable habitat. Since 2006, we have been received reports from the Riverina, South West Slopes and the Southern Tablelands districts of New South Wales, and the Wimmera and Mallee districts of Victoria. In most cases, weevils have been found attacking emerging canola crops.

There are currently no chemicals registered for controlling Mandalotus weevils, however growers have reported some success using high rates of bifenthrin or chlorpyrifos. We have also had reports that indicate crops sown with fipronil-treated seed may suffer less feeding damage than other crops. Remember that healthy plants may be able outgrow damage caused by weevils.

BRONZED FIELD BEETLE

Consultant, Tim Condon (Delta Agribusiness), has reported feeding damage to a canola crop near Harden, in the Southern Tablelands district of New South Wales. Beetles collected from the paddock have been identified as the [bronzed field beetle](#) (*Adelium brevicorne*). Tim reports around 5 beetles per square metre could be found, and the damage was quite severe with some plants completely defoliated. The affected paddock was sown to wheat in the previous two years.

Bronzed field beetles are up to 11 mm long and shiny black in colour with a slight bronze appearance. The larvae are dark brown, up to 12 mm in length and 3 mm wide. They have twelve body segments, the last one having two distinct upturned spines. The larvae are often



confused with the grey false wireworm, which is a serious pest in Victoria and parts of southern New South Wales.

Bronzed field beetles damage plants by chewing on seedlings at or above ground level. Larvae may also feed on roots and underground stems of plants however they may also be present in the soil with little or no damage to plant seedlings. This is because they primarily feed on dead organic matter and high numbers are required to cause serious crop damage. Larvae are typically found within the top 1 cm of the soil and can be found under plant material, clods of soil, rocks or wood. Bronzed field beetles are important pests of establishing canola and typically do not affect cereal and pulse crops.

MORE EARWIG DAMAGE

We have received further reports of European earwigs (*Forficula auricularia*) causing damage to crops in various regions. We identified European earwigs for agronomist, Louisa Ferrier (JSA Independent), from a seedling canola crop near Lake Bolac, in the Western district of Victoria. Agronomist, Natalie Thornton (Elders), has reported significant damage to large areas of canola crops in parts of the Western district of Victoria. In at least one instance, a paddock has required re-sowing following an earwig attack. European earwigs have also been observed causing some minor damage in a few barley crops near Bacchus Marsh, in the Western district of Victoria. Consultant, Tim Condon (Delta Agribusiness), has also reported isolated instances of earwigs in some parts of the South West Slopes district of New South Wales.

Adult European earwigs range from 12-20 mm in length, are smooth and shiny dark brown in colour with pale yellow legs. They have distinctive “pincers” that protrude from their rear end. It is believed earwig numbers have increased in recent years due to intensive cropping and stubble retention. European earwigs are mainly found on heavier soil types. They feed on the developing leaves of seedlings, slowing down plant development, and in some cases killing the plants. Typical feeding damage is shredded leaf tips and/or irregular holes in leaves. Besides canola, they can also damage cereal and legume crops.

For further information on European earwigs refer to [PestFacts Issue No. 4](#) and for images click [here](#).

PESTFACTS SERVICE

PestFacts is sent directly to readers via e-mail (subscription free). This service is produced on an ‘as-needs’ basis in response to pest observations and reports. Your support and feedback are essential to the success of PestFacts. If you have recently observed invertebrate pests (or beneficial species) in crops and pastures, contact Paul Umina or Stuart McColl on (03) 9329 8816 or email stuart@cesarconsultants.com.au. A free pest identification service is available to all PestFacts subscribers.



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