

Australian plague locust

Increased activity reported in SA

Over the past few weeks, an increase in activity of Australian plague locust, *Chortoicetes terminifera*, has been reported in some cropping and pastoral regions of SA.

Mostly low densities of adults, with occasional higher density patches, have been seen in stubble paddocks in the Upper North around Booleroo Centre and Melrose, and in the northern mallee around Wunkar (east of Loxton) and Wynarka. On Upper Eyre Peninsula, higher densities of adults and hopper nymphs have been observed around Kimba, Cowell, Buckleboo, Kyancutta, Wudinna, and Minnipa. There are reports of nymphs beginning to form bands in stubble paddocks and pastures near Kimba, adult egg-laying activity near Buckleboo, and locust activity in the Gawler Ranges.



Figure 1: Adult locust (K. Perry)

PIRSA Biosecurity SA and the Australian Plague Locust Commission (APLC) are closely observing locust populations within the state and adjacent regions of Queensland, NSW, and Victoria. APLC surveys during March and landowner reports indicate that mostly low densities of locusts, with patches of higher densities, are widely distributed in pastoral zones of northeast SA.

An increase in overall locust populations has resulted from significant rainfall across northern pastoral areas during late January and early February, which provided suitable breeding conditions and abundant green feed for locust development. Adult locusts have subsequently redistributed within and between districts. A range of other native grasshoppers have also benefitted from good breeding conditions, with reports of a species mix of locusts and other grasshoppers present in some pastoral areas.

Over coming weeks, adult locusts will seek green feed to develop and lay eggs. Any eggs laid now will enter winter diapause and hatch in spring. Adult locusts present now may persist until around mid-June and will eventually die off with the onset of winter. Meanwhile, they will continue to move within and between districts seeking feed, with warmer daytime conditions (over 20°C) and light winds (less than 11 km/h) likely to encourage more local flight movement.

In South Australia, PIRSA has initiated a two-week survey of key areas to determine the distribution of locust hotspots. The surveys will determine the extent of potential egg-laying and need for further response.

Recommended actions

Growers are encouraged to monitor locust activity and consider control options in the lead-up to sowing. If egg-laying is observed (figure 2), carefully mark the location as locusts will hatch from these areas in spring. Females prefer to lay eggs in hard, bare ground, including roadsides, tracks, sparsely vegetated pastures, and along tree lines where adults aggregate.

Locusts could feed on and damage early sown crops and pastures in localised areas with higher densities. Normal crop protection applies. Adults and hoppers can be controlled with standard APVMA registered or permitted insecticides, including products containing chlorpyrifos, malathion or synthetic pyrethroids. Consult chemical resellers for advice and adhere to product label directions, including grazing withholding periods. Seed treatments are not effective for locust control.



Figure 2: Female locust laying eggs (K. Henry)

Spraying adult locusts before crop sowing, or preventative spraying of paddocks after crop emergence, is ineffective and not recommended. Adults are highly mobile and will readily re-invade or move out of paddocks at short notice. Spraying adults is inefficient and should only be carried out where needed to protect a crop or pasture. Treatment should directly target locusts and should occur when they are settled, either late in the evening or early in the morning.

On properties where bands of locust hopper nymphs are present, it is recommended to monitor and spray any hopper bands now to prevent feeding damage and control local populations before sowing. The most efficient and effective way to control locusts is to directly target nymphs in late 2nd to 3rd instar stages, when they concentrate into dense bands that march and feed.

Locust identification

Adults of the Australian plague locust are relatively easy to identify by the presence of a characteristic black spot on the tip of the hind wing, and bright red or orange-coloured shanks on the hind leg (figures 1, 2). All individuals with fully developed wings are adults. Nymphs (hoppers) are more difficult to identify (figures 3, 4). If a dense mass (band) of hoppers is found, it is likely to be the plague locust. Other native grasshopper species can be confused with Australian plague locust, but none of the species found in SA are migratory – see the [APLC locust and grasshopper identification guide](#).

Reporting significant locust infestations

Landholders across the state are asked to report any significant infestations of adult locusts and hoppers to PIRSA by emailing pirsa.planthealth@sa.gov.au.

Please include the following details:

- date and location (GPS coordinates)
- description of location (paddock, tree line, creek line, etc)
- life stage (adults or hoppers)
- density and size/area of infestation (e.g. number of hoppers per square metre, area infested)
- your return phone number.



Figure 3: Locust hopper nymphs (K. Perry)



Figure 4: Hopper band (K. Perry)