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Rutherglen bug

A large population of Rutherglen bug (*Nysius vinitor*) (RGB) was discovered in a moisture stressed canola crop near **Mannanarie** in the Mid North. Pods and grain were noticeably small and shrivelled, however the extent that pest feeding had contributed to these symptoms was unclear (Steve Richmond, Landmark). Rutherglen bug populations often build quickly at this time of year, and we recommend checking canola crops in the vicinity of weedy areas.

Rutherglen bug typically attacks canola and sunflowers in spring and early summer. This species is a highly opportunistic pest often that breeds rapidly under favourable conditions. Hot, dry conditions during flowering to harvest increase the risk of population build-up. This pest is often associated with weeds, particularly fleabane, goosefoot, wireweed and capeweed. Adults and nymphs typically invade crops from weeds drying off in or near the crop, often resulting in patchy infestations. However, the adults are highly mobile and capable of migrating long distances into cropping areas from breeding grounds in warmer regions.

Rutherglen bug adults and nymphs suck sap from leaves, stems, flowers and pods. Impacts of feeding are generally increased in moisture stressed plants, and may include reduced seed yield, oil quality and seed viability. Plants with adequate soil moisture can often tolerate higher numbers. If warranted, spot spray infested areas of crop and weeds as needed, using a registered insecticide, and monitor for re-invasion 7 days later. Adults are grey-brown, 4 mm in length with narrow-bodies and prominent dark eyes, and have clear wings folded flat on their back. Nymphs look somewhat different from the adults; they are wingless, dark red in colour with a 'swollen' pear-shaped body. More information: southern Ute Guide (pg. 65), [Rutherglen bug, DAFWA](#) and [Rutherglen bug in canola, NIPi](#).

Stored grain insects

Stored grain insects can pose a serious threat to grain quality; therefore, careful management of the storage environment is critical. Generally, good hygiene, aeration cooling and correct fumigation can prevent or overcome many problems with storage pests. The following steps are recommended:

- Remove all grain residues and spillages from in and around empty storage facilities, and grain handling and carriage equipment before new grain is stored and equipment is used.
- Ensure insect pests are not carried onto your property on farm machinery. Ensure equipment is thoroughly cleaned after use.

- After cleaning, treat storages and equipment with an inert dust treatment.
- Check all seals on gas-tight sealed silos before each filling and replace if worn or damaged. Conduct a pressure test to ensure the silo is gas-tight before fumigating.
- Install aeration cooling fans and an aeration controller in storages to reduce grain temperature and insect breeding, and aid grain quality.
- Monitor grain monthly for insects, moulds, grain temperature and moisture.
- Generally, grain stored for more than six weeks should be treated for insect pests. All fumigation must be conducted in pressure-tested sealable gas-tight silos.

The widespread use of phosphine has resulted in the development of high levels of resistance in a number of stored grain pests. To help manage resistance, ensure phosphine is only used when necessary and fumigation takes place in well maintained gas-tight storages. Phosphine should be held at lethal concentrations for 7-10 days to ensure effective control of all insect life stages. Poor fumigation results in a partial kill (usually only adults) and selects for resistance. Under phosphine label regulations, a “fumigation in progress” warning sign must be displayed. A phosphine warning sign can be freely [downloaded](#).

Look out for unusual pests in stored grain, such as [knapweed beetle](#) (*Trogoderma granarium*) and [karnal bunt](#) (*Tilletia indica*), which are classed as high priority exotic pests of the grains industry. If you detect anything unusual, submit it for diagnosis or call the Exotic Plant Pest Hotline on 1800 084 881. More information on grain storage insects, including identification, monitoring and management: [Stored Grain Pests Identification, GRDC](#) (pdf), [Grain Storage Pest Control Guide, GRDC](#) (pdf) and [Stored grain photo gallery, Qld DAFF](#) or www.storedgrain.com.au.

Summer weed management to reduce pests

Weeds and volunteer crop plants form a mass of vegetation that grows along roadsides, in water courses, paddock perimeters as well as headlands and any other non-cropped areas of land, and this is often referred to as the “green bridge”. This green bridge offers a refuge to insect pests and diseases when crops are absent through summer, but also during the cropping season.

The presence of host plants for pests and diseases can bring about infestations of crops during the season that can be persistent, economically damaging, and difficult to control. In the case of green peach aphid and diamondback moth, resistance to a wide range of insecticides makes control particularly problematic. Following the experiences of green peach aphid, beet western yellows virus (BWYV) and diamondback moth this season, management of summer weeds and volunteers should be considered. Host plants of BWYV include weeds, such as wild radish, wild melon, fleabane, stinkweed, blackberry nightshade, marshmallow, bedstraw, thistles and volunteer canola, as well as pastures including lucerne, medic and sub-clover. Host plants of green peach aphid include a wide range of broadleaf plants, while hosts for DBM include Brassicaceous weeds, wild turnips, wild radishes, wild mustards and Lincoln weed.

For highly mobile insect species, such as aphids and moths, localised weed management may not alone be sufficient to prevent crop infestations. Ultimately, landscape scale approaches to weed management, involving cooperating between neighbours, may need to be considered to reduce pest reservoirs.

Seasonal conditions such as late summer rains provide an indication of the ‘green bridge’ risk from year to year. This season, above average rainfall during February and April, promoting weed growth, combined with above average temperatures in May, apparently

favoured widespread pest population growth and flight activity, leading to early crop infestation. Weeds should be controlled early, ideally well before sowing; Relying solely on herbicides applied at or after sowing will often be too late to prevent movement of pests and/or diseases into emerging crops. More information: [Green Bridge Management Fact Sheet, GRDC](#) (pdf).

o **Responsible herbicide use reminder and canola audits**

(Thanks to David Hubbard, Rural Chemicals Liaison Officer, Rural Chemicals Operations, Biosecurity SA).

With the commencement of bud burst in grape vines and ongoing weed control across the warmer months, Biosecurity SA's Rural Chemicals Operations unit (RCO) are reminding producers to use all summer herbicides responsibly. Regulation brought in last year controlling the use of Group I herbicides must be followed (see [Group I herbicide requirements, Biosecurity SA](#)).

RCO recently began auditing a small number of canola producers across the state. The audits aim to better understand chemical use by producers during the current growing seasons following high insect pest pressures. A focus of the audits was checking that no 'off-label' use (that is, use of products that are *not* registered or permitted for canola) of insecticides took place. This could potentially put at risk our valuable canola export markets by causing a residue violation. RCO is pleased to report from the audits conducted so far that producers were all following label instructions and no off-label insecticide use has been identified. The audits also checked compliance with the Group I herbicide regulations and while compliance with label instructions and training was very good, the audits identified that producers need to improve their *record keeping* to comply with the regulations (see [Group 1 Herbicide record keeping requirements, PIRSA](#) (pdf).

RCO will continue to promote the Group I herbicide regulations and encourage growers to implement industry best practice concerning record keeping. These records are not only a mandatory requirement but a timely reminder to growers of the risks associated with spraying Group I herbicides near other crops and the community.

Resources

- ❖ **Insect diagnostics:** SARDI Entomology offers an insect diagnostic service for PestFacts subscribers. Please send at least two intact specimens in a non-crushable container along with host food, collection details, description of crop damage and contact details, to: NIPI diagnostics SARDI Entomology Unit GPO Box 397, Adelaide SA 5001.
 - ❖ **PestFacts map** is a new interactive service available on the SARDI website at www.sardi.sa.gov.au/pestfacts-map. The map allows users to search and view all historical pest reports across South Australia and Western Victoria. Search by crop, pest or beneficial invertebrate, and time period of interest. The map will be updated with each issue to include new reports.
 - ❖ **'Best Bet' IPM strategies** for major pests of grains crops are available in easy-to-use tables, downloadable from the [IPM workshops website](#).
 - ❖ **IPM guidelines for grains:** The new national [IPM guidelines for grains website](#) provides a comprehensive collection of tools and strategies to manage pests in grain cropping systems across Australia.
- [Previous issues of PestFacts](#) • • [PestFacts map](#) • [Images of insects and damage](#) • [I SPY manual](#) • [Crop mites: back pocket guide](#) • [Crop weevils: back pocket guide](#) •

PestFacts is a FREE service providing updates throughout the growing season on an "as-needed" basis of the latest information on invertebrate pests in broad acre crops in South Australia and western Victoria. It is supported by GRDC's National Invertebrate Pest Initiative (NIPI). All information is sent by email to subscribers. Please

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