



New Zealand shield bug ID guide

Including unwanted exotic shield bugs





The guide has been produced for the kiwifruit industry by
Kiwifruit Vine Health (KVH).

It has been edited by Frances MacDonald and
Dr Gonzalo Avila, Bioeconomy Science Institute,
120 Mount Albert Road, Mount Albert, Auckland, New Zealand.

Seasonality graphs have been completed by Dr Samuel Brown,
Bioeconomy Science Institute.

Image: Glaucias eggs. Source: © 2026 Bioeconomy Science Institute.



Within this guide

Aotearoa New Zealand species

Listed by common names

1. Alpine brown soldier bug (*Cermatulus nasalis hudsoni*)
2. Australasian green shield bug (*Glaucias amyoti*)
3. Black alpine shield bug (*Hypsithocus hudsonae*)
4. Brown shield bug (*Dictyotus caenosus*)
5. Brown soldier bug (*Cermatulus nasalis nasalis*)
6. Green potato bug (*Cuspicona simplex*)
7. Green vegetable bug (*Nezara viridula*)
8. Pittosporum shield bug (*Monteithiella humeralis*)
9. Schellenberg's soldier bug (*Oechalia schellenbergii*)

Unwanted exotic species

Listed by common names

1. Brown marmorated stink bug (*Halyomorpha halys*)
2. Yellow spotted stink bug (*Erthesina fullo*)

This guide has been designed to support the identification and reporting of exotic shield bugs, particularly Brown marmorated stink bug and Yellow spotted stink bug.

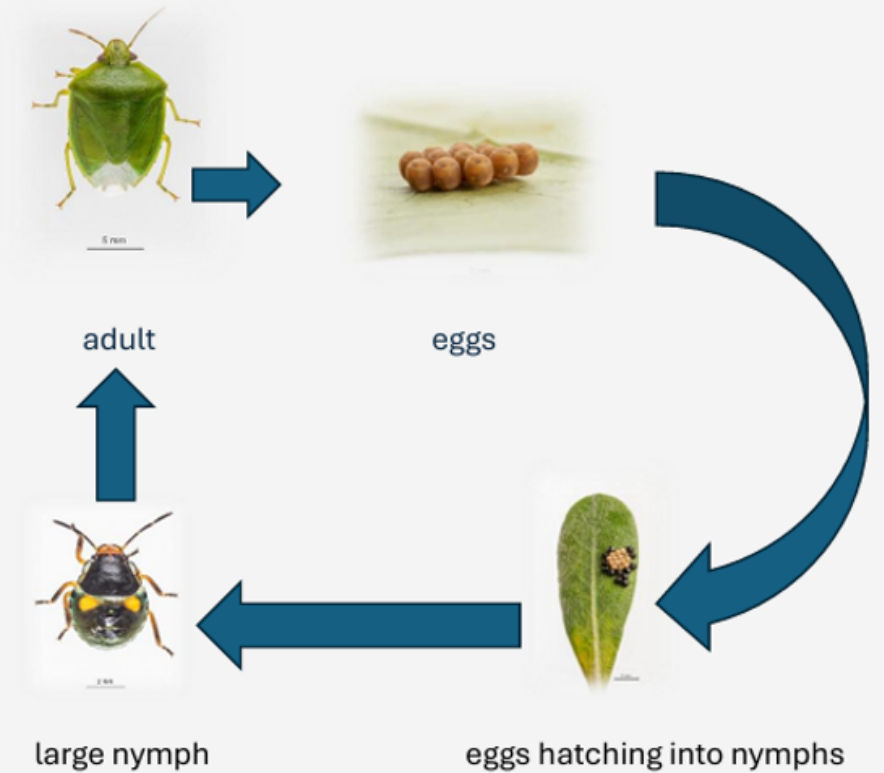
Because these pests can look very similar to shield bugs already found in New Zealand, identification can be challenging. This guide highlights key features to help distinguish high-risk exotic species from common local species. Early reporting is one of New Zealand's most important surveillance tools for detecting exotic pests before they become established.

Life cycle of stink bugs

Stink bugs (family Pentatomidae) develop by incomplete metamorphosis, so there is no pupal stage. The cycle runs from egg to nymph to adult. Females lay eggs in clustered batches on leaves and stems, and the hatchlings emerge as nymphs – small, wingless versions of the adult.

Each nymph passes through five growth stages called instars, shedding its skin (moulting) between each one. With every moult the nymph grows larger, its colour and patterning shift, and its wing pads develop and enlarge. Early instars are often brightly coloured and cluster together, while later instars come to resemble the adult more closely.

After the fifth and final moult, they are a fully winged, reproductive adult.



Life cycle of pentatomids

Alpine brown soldier bug

Cermatulus nasalis hudsoni

Native: Present
in New Zealand

SIZE

Adults measure 9-10 mm.

COLOUR RANGE

Black eggs with a ring of short white spines, usually in a batch of up to 14. Hatching nymphs are red; adults are dark brown with orange/lighter brown patterning.

DISTRIBUTION

One of three subspecies found in New Zealand, present in the alpine areas of the South Island.

LIFE STAGES AND ANNUAL CYCLE

Eggs are found from November to February. Once hatched, five nymphal stages develop into adults during summer. They overwinter as adults and probably have only one generation per year.

FEEDING

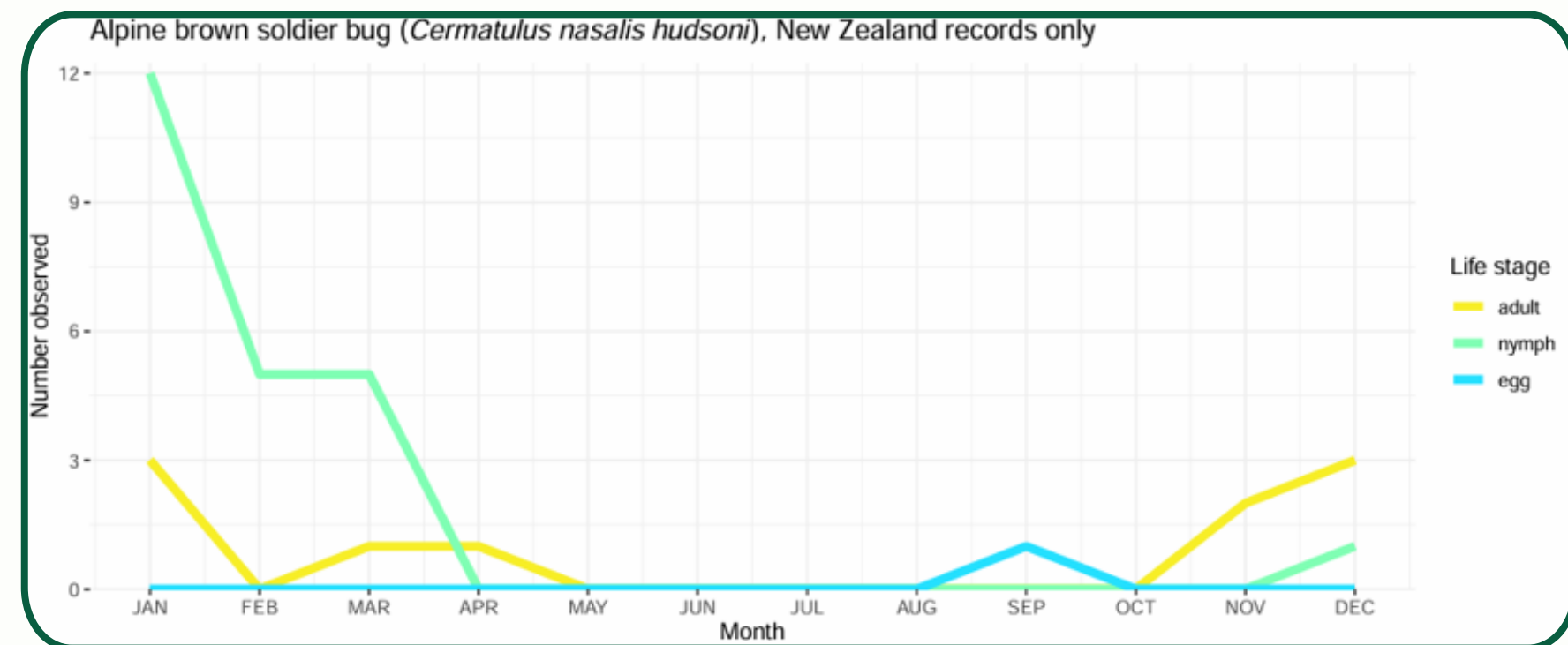
As predators, their food includes live caterpillars.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

Very little is known about the natural enemies of the Alpine brown soldier bug. No known egg parasitoids have been found emerging from this species, although this may be possible as it is with other stink bug species in New Zealand.



Images: Eggs, nymph and adult of Alpine brown soldier bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Australasian green shield bug

Glaucias amyoti

Native: Present
in New Zealand

SIZE

Adults measure 12-17 mm.

COLOUR RANGE

Eggs are tan and laid in batches of up to 14; new nymphs are black, then mostly green with yellow spots. Adults are green.

DISTRIBUTION

Found throughout the North Island, and in Nelson and Marlborough in the South Island.

LIFE STAGES AND ANNUAL CYCLE

Eggs are laid from late spring to late summer, and once hatched, there are five nymphal stages that develop into adults. There are several generations per year. Adults overwinter on trees and shrubs.

FEEDING

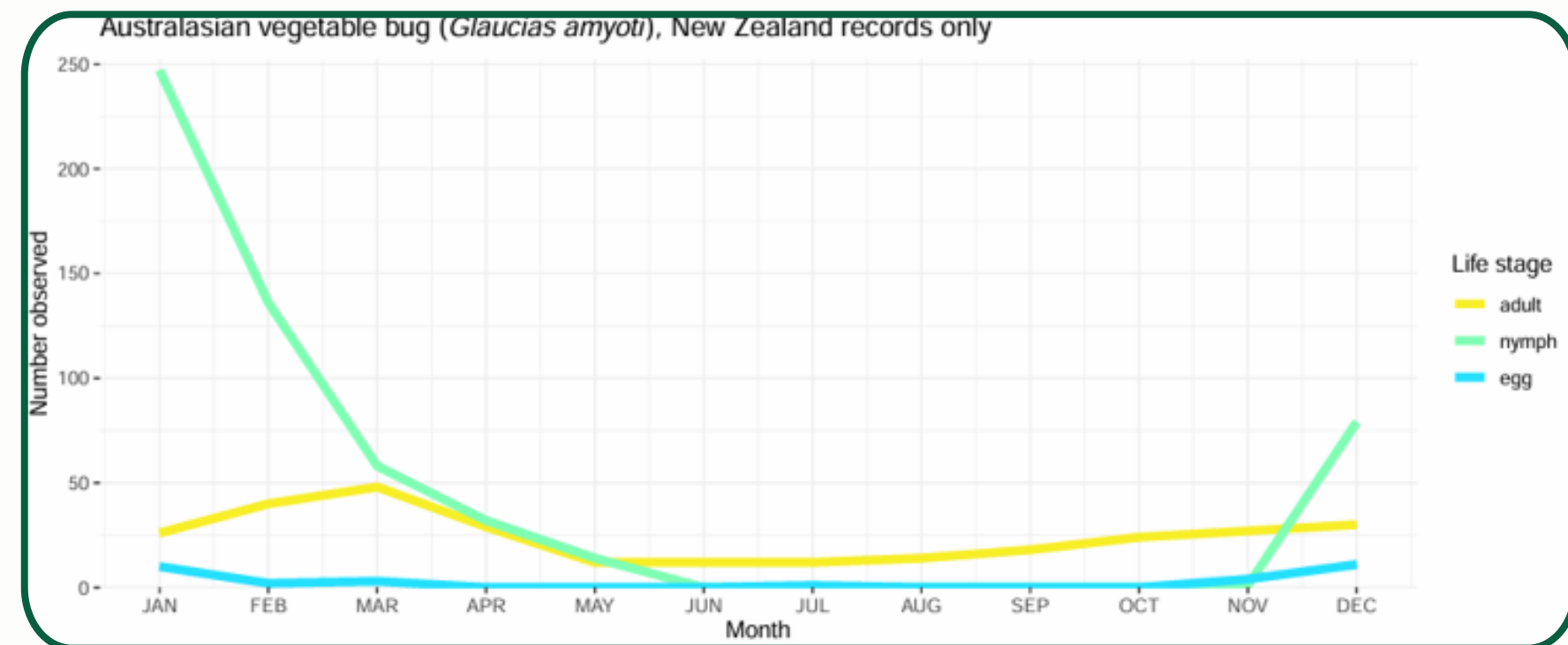
Host plants include a wide range of trees and shrubs commonly found in gardens (such as hebe) and native ecosystems (such as lemonwood), as well as pest plants including woolly nightshade and privet.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

Common egg parasitoids found in New Zealand include *Trissolcus basalis*, *Trissolcus oenone*, *Trissolcus sp.*, and *Telenomus sp.* Another parasitoid, *Aridelus rufotestaceus*, attacks the juvenile stages of shield bugs.



Images: Eggs, nymph and adult of Australasian green shield bug. Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Black alpine shield bug

Hypsithocus hudsonae

Native: Present
in New Zealand

SIZE

Adults measure 7-9 mm.

COLOUR RANGE

Eggs are pale yellow and laid in small masses of around six or seven; new nymphs are initially dark grey then change to dark brown/black, often with a thin pale edge on the body. Adults are dark brown to black in colour. Adults have wings shorter than their abdomens.

DISTRIBUTION

Found only in central and western Otago, South Island.

LIFE STAGES AND ANNUAL CYCLE

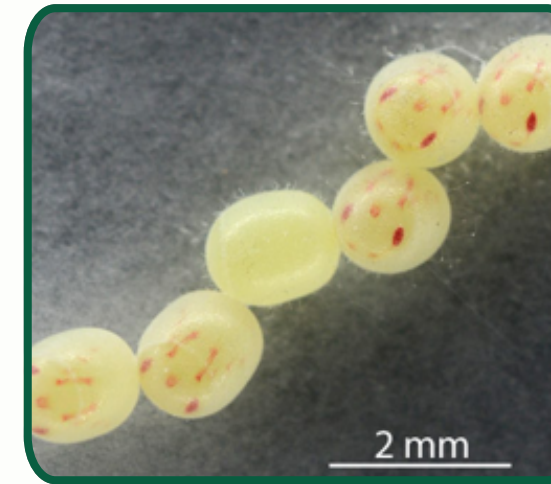
Little is known about the annual cycle; however, eggs are probably laid in spring and early summer. There are five nymphal stages that develop into adults. Nymphs develop during late spring and summer, with new adults emerging in mid-to-late summer. Flightless adults have been found between November and February, and large nymphs have been found from December to February.

FEEDING

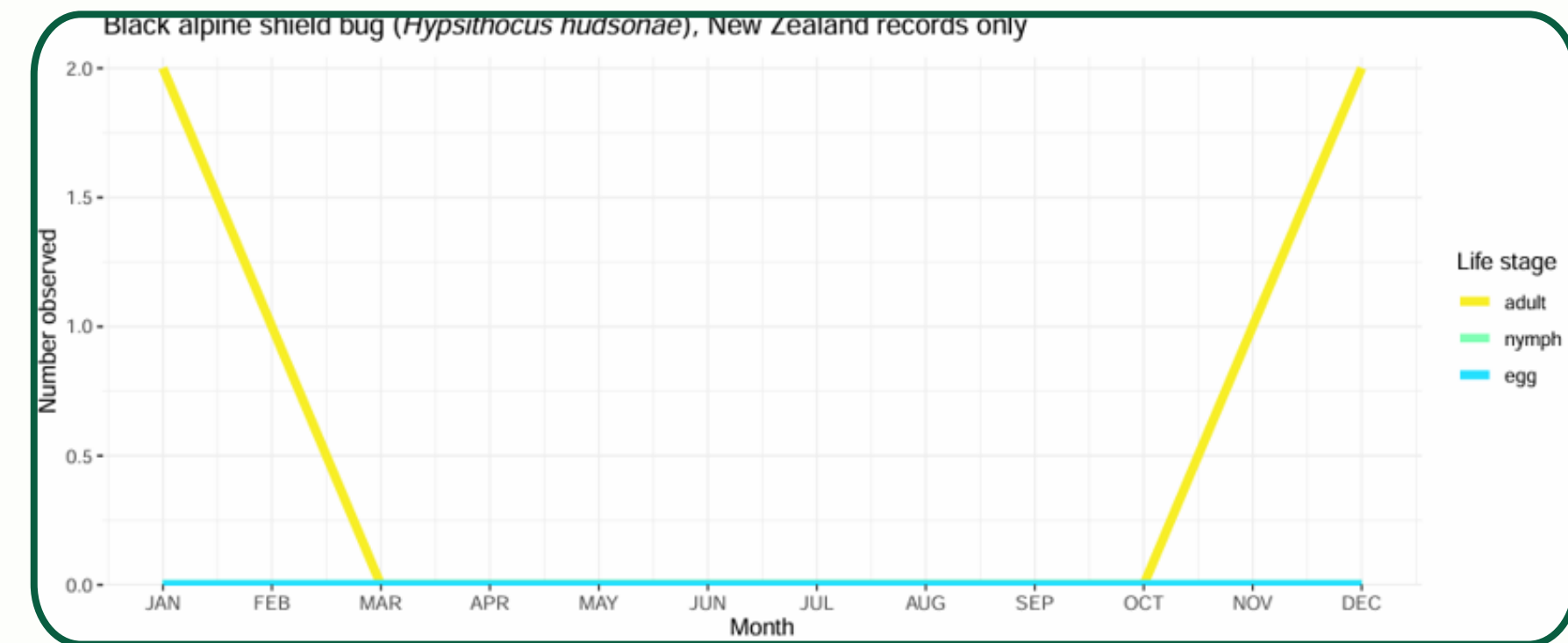
Host plants include low-growing alpine plants and boxwood hebe.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

Very little is known about the natural enemies of the Black alpine shield bug, and there are no known egg parasitoids found emerging from this species, although this may be possible, as it is with other stink bug species present in New Zealand.



Images: Eggs, nymph and adult of Black alpine shield bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Brown shield bug

Dictyotus caenosus

Introduced:
Present in New
Zealand

SIZE

Adults measure 8-10 mm.

COLOUR RANGE

White eggs, usually in a batch of around 14. The hatching nymphs are black and red. Adults are brown to dark brown.

DISTRIBUTION

Present in the North and South Islands.

LIFE STAGES AND ANNUAL CYCLE

There appears to be a single generation per year, with eggs found in late spring and early summer. There are five nymphal stages that develop into adults. The nymphs become adults during summer.

FEEDING

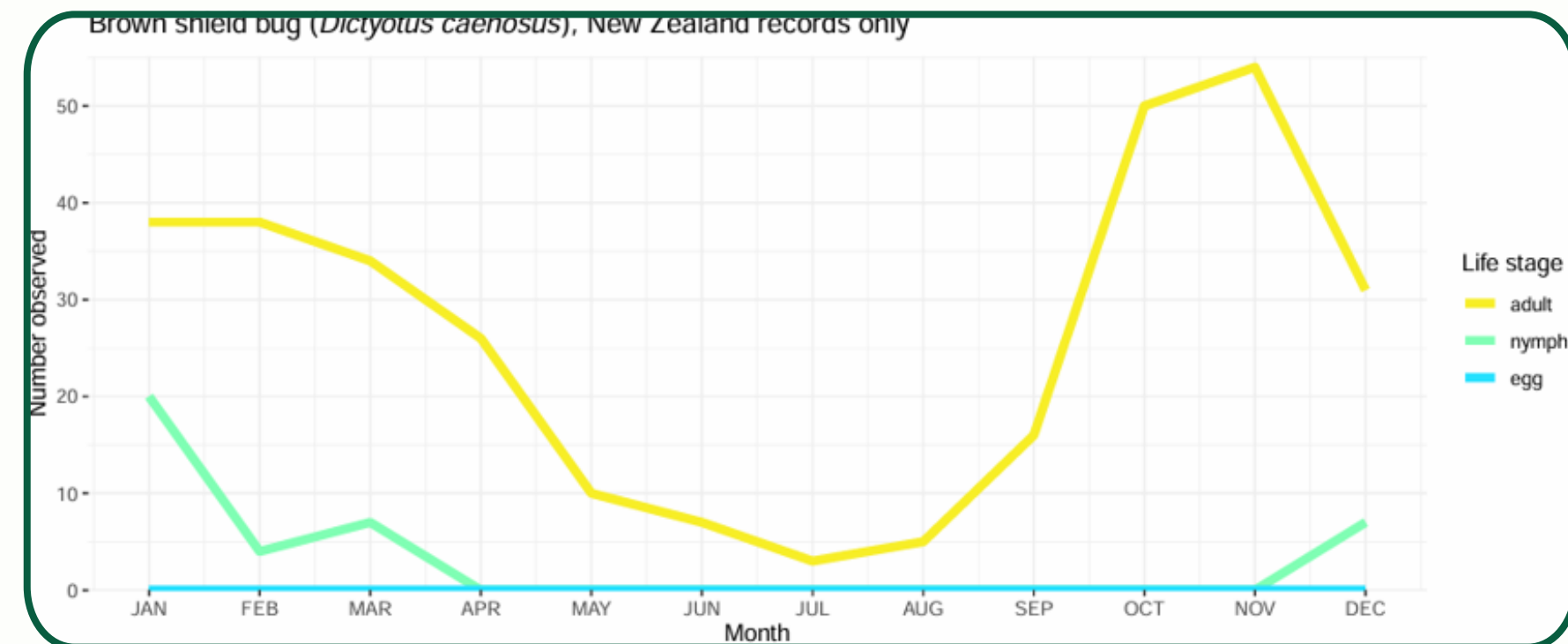
Host plants include developing seeds of alfalfa, lucerne, plantain, blackberry, and wheat.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

Trissolcus basalus and *Trissolcus oenone*, are known egg parasitoids that attack this species of stink bug.



Images: Eggs, nymph and adult of Brown shield bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Brown soldier bug

Cermatulus nasalis nasalis

Native: Present
in New Zealand

SIZE

Adults measure 10–12 mm.

COLOUR RANGE

Eggs are black with a ring of short white spines on the top. Hatching nymphs are black on top with a white/yellow patch on the sides of their abdomen, which is dark red/black. Adults are orange to brown, to dark brown with black markings.

DISTRIBUTION

Widespread in native ecosystems, gardens, and parks in the North and South Islands.

LIFE STAGES AND ANNUAL CYCLE

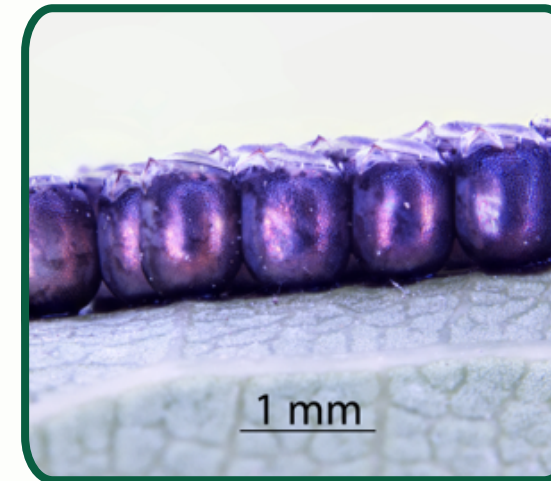
There appears to be a single generation, with eggs found from November to February. Each female lays several batches of eggs. There are five nymphal stages that develop into adults. The nymphs grow into adults during the summer.

FEEDING

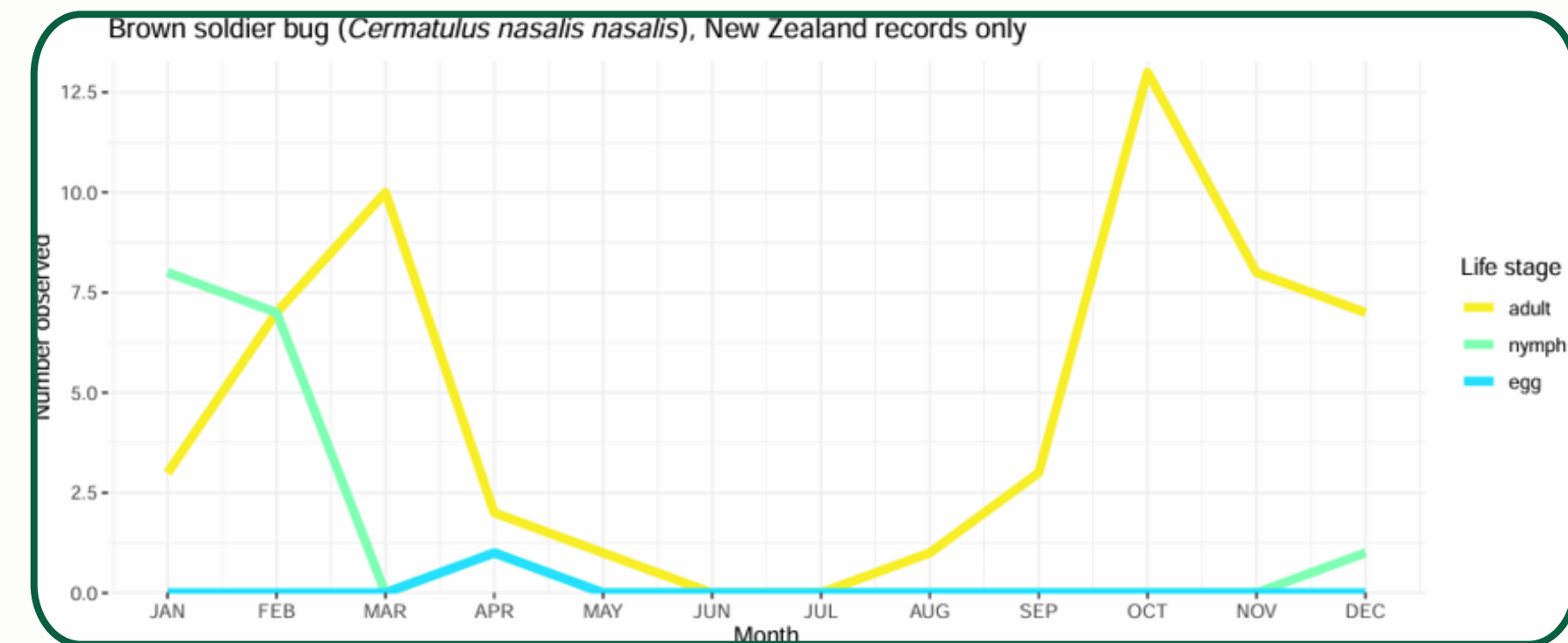
As predators, their food includes live caterpillars.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

There are two known egg parasitoids found emerging from this species of stink bug: *Trissolcus oenone*, and *Telenomus* sp and *Acroclisoides* sp.



Images: Eggs, nymph and adult of Brown soldier bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Green potato bug

Cuspicona simplex

Introduced:
Present in New
Zealand

SIZE

Adults measure 8–10 mm.

COLOUR RANGE

Eggs are pale green and usually laid in a batch of around 14. Hatching nymphs are black and grey and turn green, and adults are green.

DISTRIBUTION

Found in crops, gardens, parks, and native ecosystems throughout the North and South Islands.

LIFE STAGES AND ANNUAL CYCLE

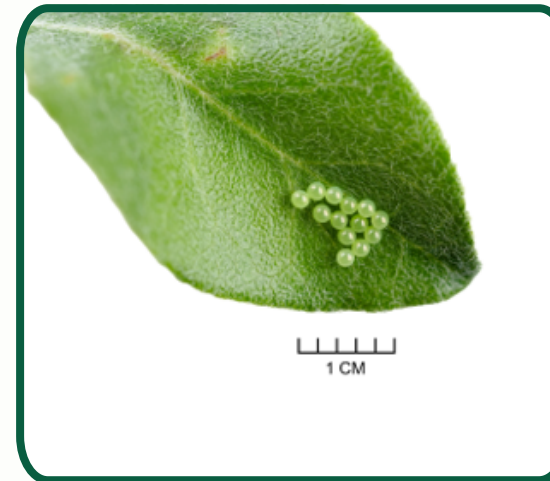
Females begin laying eggs in spring and lay multiple batches of eggs over several weeks until late summer, with one to three generations. There are five nymphal instars stages. Green potato bugs overwinter as adults.

FEEDING

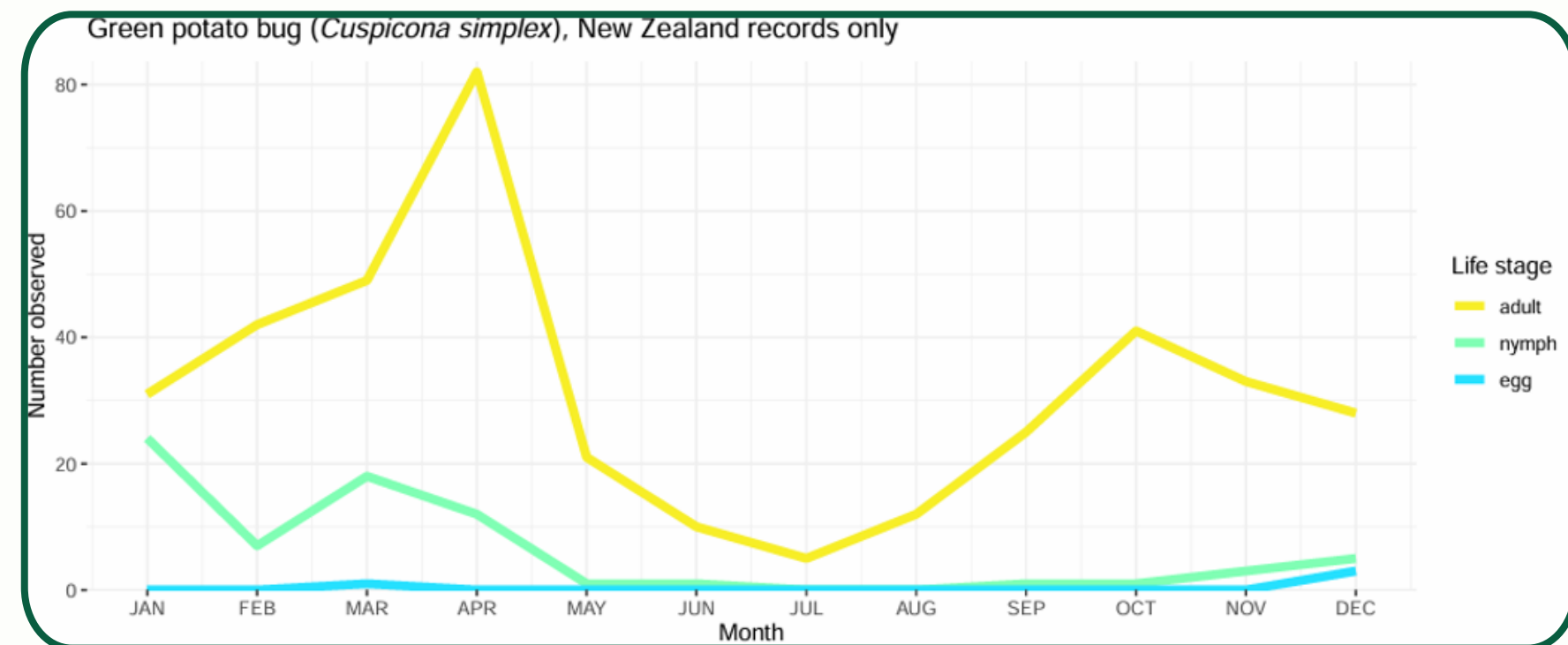
Host plants are native and naturalised *Solanum* species, including poroporo, tomato, woolly nightshade, and black nightshade.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

There are two known egg parasitoid wasp species found emerging from this species of stink bug: *Trissolcus oenone* and *Acroclisoides* sp.



Images: Eggs, nymph and adult of Green potato bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Green vegetable bug

Nezara viridula

Introduced:
Present in New
Zealand

SIZE

Adults measure 14-16 mm.

COLOUR RANGE

Eggs are yellow and are laid in a large raft of between 40 and 80. Hatching nymphs are red and black, and then vary between red, black, orange, pink, and green. Adults are green and have three distinctive small white spots on their backs, with occasional brown adults observed.

DISTRIBUTION

Found throughout the North Island and warmer parts of the South Island.

LIFE STAGES AND ANNUAL CYCLE

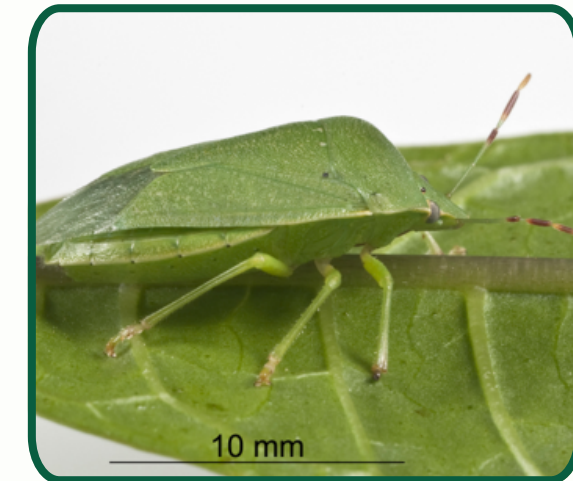
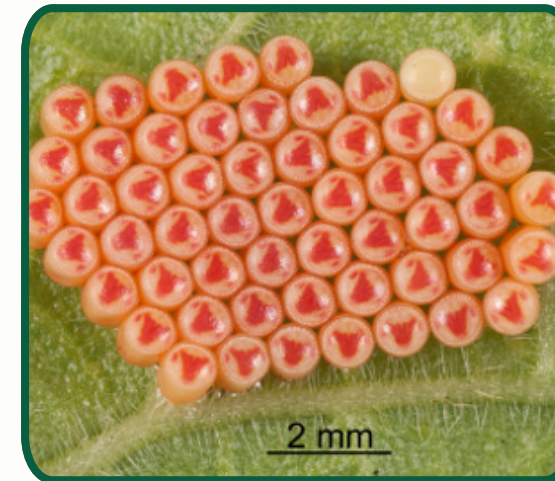
Eggs are laid in spring; there are five nymphal stages, with nymphs turning into adults in early summer. There are two or more generations per year, with females ceasing to lay eggs in late summer. Adults overwinter at the bases of perennial plants.

FEEDING

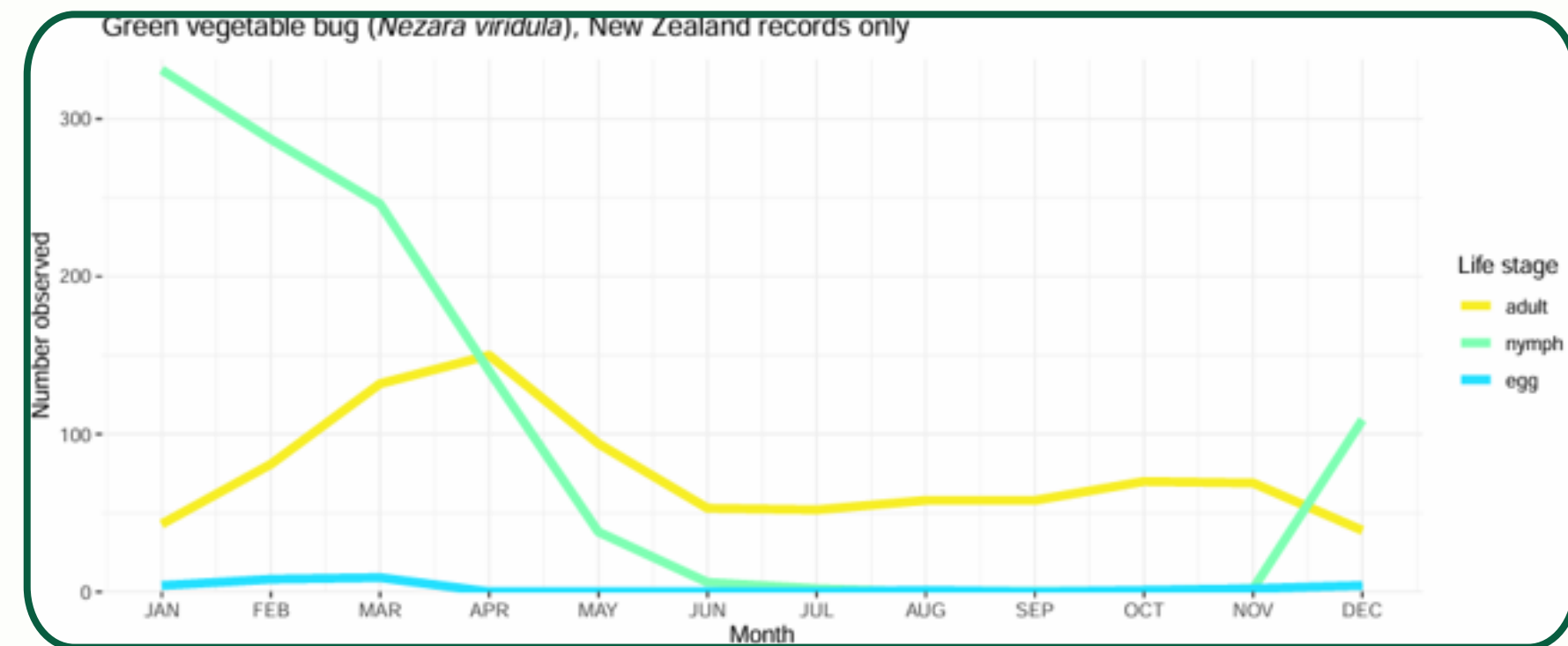
A broad range of host plants, including many vegetables, some native plants, arable crops, and fruit and nut crops.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

Aridelus rufotestaceus is a parasitoid that has been found to emerge from nymphs, and there are two known wasp egg parasitoid species found emerging from this species of stink bug: *Trissolcus basalis* and *Acroclisoides* sp.



Images: Eggs, nymph and adult of Green vegetable bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Pittosporum shield bug

Monteithiella humeralis

Introduced:
Present in New
Zealand

SIZE

Adults measure 8-10 mm.

COLOUR RANGE

Eggs are pale green and laid in a batch of up to 14. Hatching nymphs are brown to black, then change to a variety of combinations including spots of white and yellow. Adults are mottled with a combination of dark tan, caramel, and cream, with distinctive light green legs.

DISTRIBUTION

Found in gardens, parks, and native ecosystems in the North and South Islands.

LIFE STAGES AND ANNUAL CYCLE

Females lay eggs between late spring and late summer. There are five nymphal stages observed between November and April. After overwintering on *Pittosporum* trees, adults start breeding in spring. This generally starts on trees with unripe fruit and continues until late summer. There are likely to be several generations of this species per year.

FEEDING

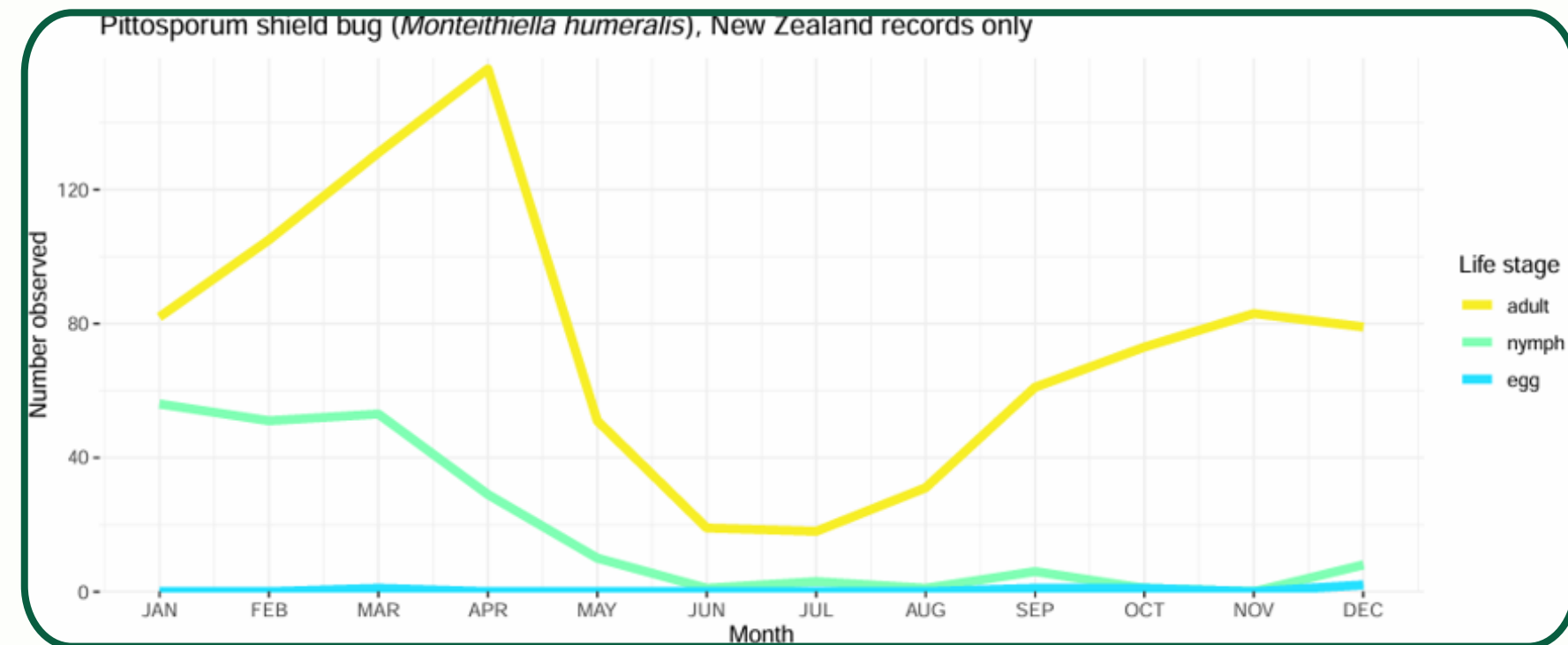
Multiple *Pittosporum* species, like karo, lemonwood and kohuhu.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

There are three known egg parasitoid wasps found emerging from this species of stink bug: *Trissolcus oenone*, *Trissolcus sp* and *Acroclisoides sp*.



Images: Eggs, nymph and adult of Pittosporum shield bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Schellenberg's soldier bug

Oechalia schellenbergii

Native: Present
in New Zealand

SIZE

Adults measure 8-12 mm.

COLOUR RANGE

Eggs are black with a distinctive ring of white spines, and often in a batch of either 14 or 28. Hatching nymphs are mostly black and red, developing a distinctive orange to red ring-shaped marking with a mostly black body as they mature. Adults are mid-to-dark brown, with caramel markings. They have distinctive, pointed, spine-like “shoulders”.

DISTRIBUTION

Found in the North and South Islands in gardens, parks and native ecosystems.

LIFE STAGES AND ANNUAL CYCLE

They are considered to have a single generation each year. Females lay several batches of eggs from December to March. There are five nymphal stages that grow into adults during summer and autumn.

FEEDING

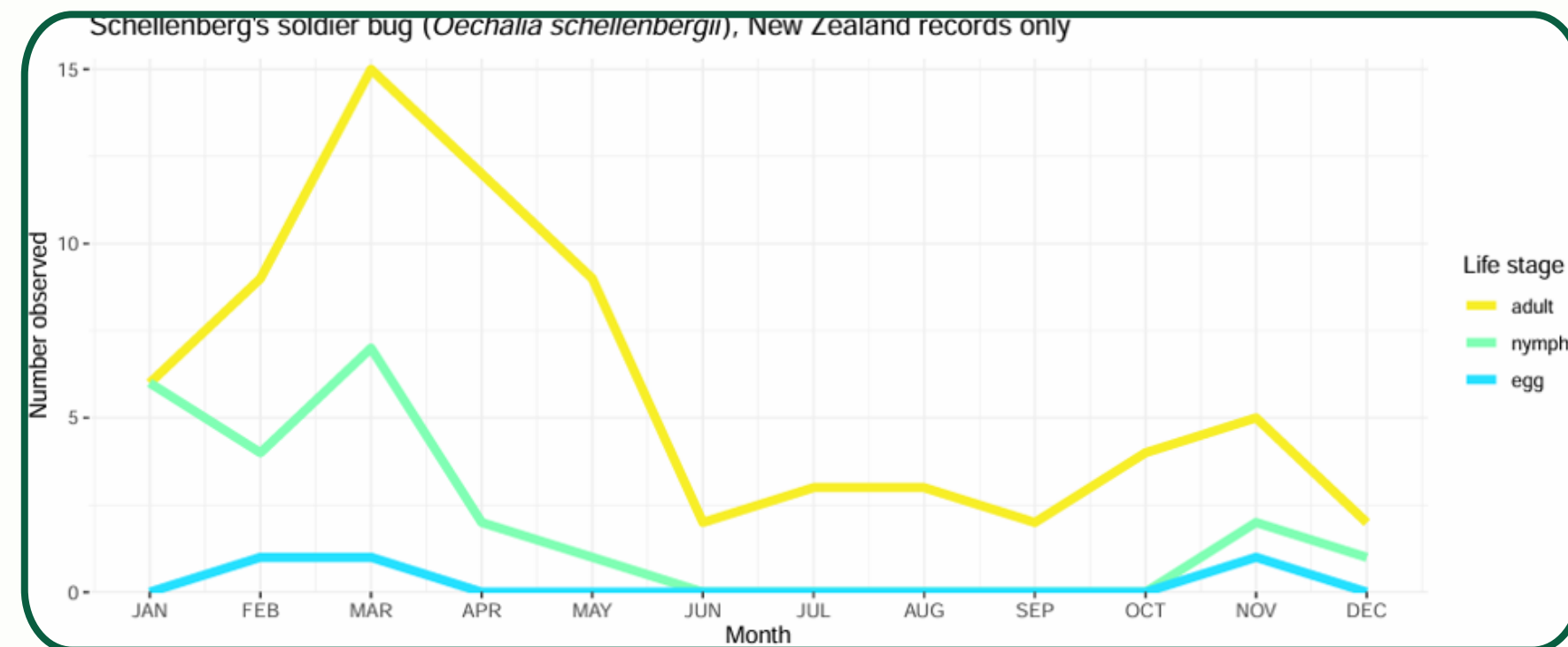
As predators, their food includes live caterpillars and beetle larvae.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

There is one known egg parasitoid wasp found emerging from this species of stink bug: *Trissolcus oenone*.



Images: Eggs, nymph and adult of Schellenberg's soldier bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Brown marmorated stink bug - BMSB

Halyomorpha halys

Exotic: Not
present in
New Zealand

If you see me report me to KVH on 0800 665 825
or Biosecurity New Zealand on 0800 80 99 66

SIZE

Adults measure 12-15 mm.

COLOUR RANGE

Eggs are light green and laid in batches of up to 28. There are five nymphal instars (stages). Nymphs are initially black, orange, and yellow with spotted markings, and then develop into adults, becoming marbled combinations of brown to black with cream patches. Adults have distinctive “broad shoulders”.

DISTRIBUTION

Not present in New Zealand. Native to eastern Asia. It is now found in the USA, South America, and Europe.

LIFE STAGES AND ANNUAL CYCLE

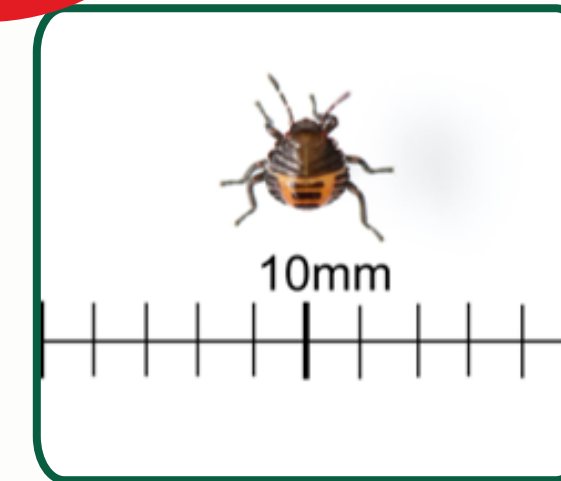
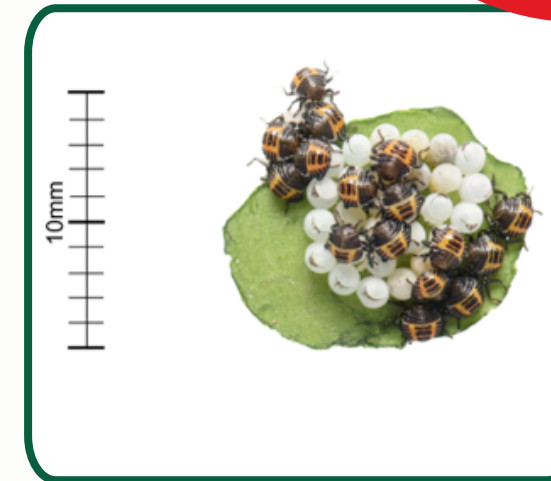
Adults can produce multiple egg batches throughout their lifetime. Adults overwinter in sheltered places, including inside buildings and cars.

FEEDING

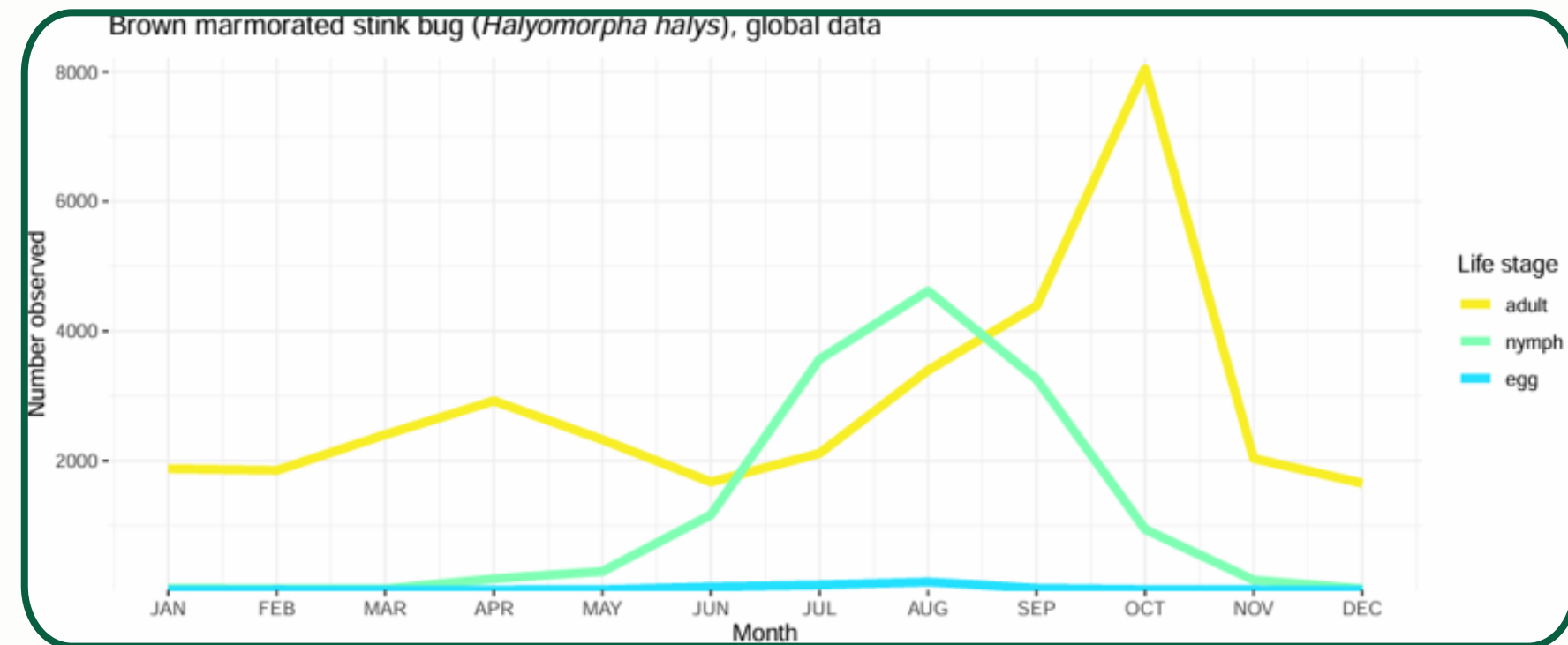
BMSB prefers trees over other plants. Host trees/plants include a broad range of species, including citrus, stonefruit, berries, grapes, maize, pipfruit, asparagus, and roses, as well as woody ornamentals such as maples. Kiwifruit is a known host overseas.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

Several natural enemies, most of them egg parasitoid wasps, have been confirmed emerging from this invasive stink bug species. For example, in China, egg parasitoid species in five genera (i.e. *Trissolcus*, *Telenomus*, *Anastatus*, *Ooencyrtus*, and *Acroclisoides*) have been reported attacking BMSB. Among these parasitoids, the most predominant species reported is the Samurai wasp (*Trissolcus japonicus*).



Images: Eggs, nymph and adult of BMSB.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Yellow spotted stink bug - YSSB

Erthesina fullo

Exotic: Not
present in
New Zealand

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or Biosecurity New Zealand on 0800 80 99 66

SIZE

Adults are approximately 16 mm in length.

COLOUR RANGE

Eggs are light greenish and laid in batches of about 12 eggs. Newly hatched nymphs have distinctive orange and black bands. Larger nymphs are tear-shaped, with brownish-grey colouration, a yellow outline, and scattered red spots. A central yellow line runs from the head to the thorax.

DISTRIBUTION

Not present in New Zealand. It is native to Asia, including China, Japan, Vietnam, and Taiwan.

LIFE STAGES AND ANNUAL CYCLE

Eggs are laid in spring. There are five nymphal stages. Nymphs develop into adults during summer. Adults overwinter in sheltered places, such as under bark or in natural crevices.

FEEDING

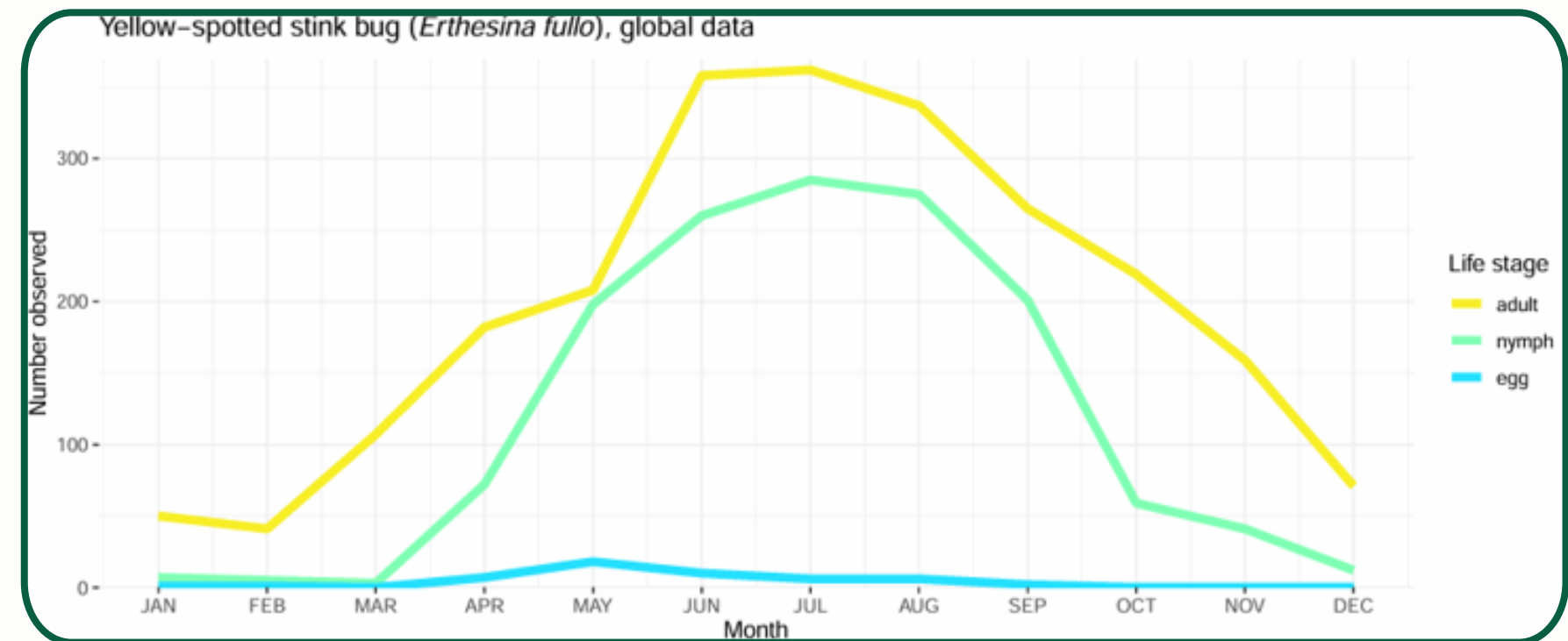
Trees and horticultural crops, including kiwifruit, pears, peaches, and nectarines.

NATURAL ENEMIES INCLUDE TINY WASPS THAT PARASITISE THE EGGS OF SHIELD BUGS

Anastatus japonicus is the only known egg parasitoid of this invasive stink bug species.



Images: Nymphs and adult of Yellow spotted stink bug.
Source: © 2026 Bioeconomy Science Institute.



Graph source: © 2025 iNaturalist.

Glossary

Distribution

Geographic spread.

Endemic

An insect or plant that is native and only found in New Zealand.

Natural enemy

Predator, parasitoid.

Nymph

The juvenile life stage of an insect resembling the adult but without wings.

Overwinter

Enter a state of dormancy to survive winter.

Parasitoid

A small wasp that lays its eggs into a host insect, preventing the young from developing and hatching, eventually causing death.

Perennial

Present all year round.

Predator

Insect that consumes another insect.

Subspecies

A further division of a species based on a small difference.