

Effective management strategies for Perth vegetable growers to control stable fly breeding

May 2025

Are you a vegetable grower in one of these Local Government Areas (LGAs)? If so, your community needs your help to reduce the number of stable flies that cause pain and distress to people and animals, especially when multiple flies bite at once.

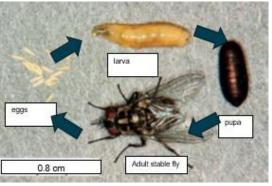
- Cities of Armadale, Cockburn, Joondalup, Kwinana, Rockingham, Swan, Kalamunda and Wanneroo.
- Shires of Capel, Chittering, Gingin, Harvey and Serpentine–Jarrahdale and the portion of the Shire of Murray described as the Peel-Harvey Coastal Plain Catchment
 State Planning Policy No. 2.1.

Stable fly is a declared pest under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) and is assigned to control category C3 (management) for these 14 LGAs.

As a landowner or occupier, you are responsible for controlling stable fly breeding on your property to reduce their numbers and impact on the community (BAM Act).

What is stable fly and why is it a problem in Perth?

- Stable fly (Stomoxys calcitrans) is a blood sucking parasitic fly with an extremely painful bite.
- It is also known by other common names such as biting house fly, dog fly, power mower fly, and barn fly.
- Its only food source is fresh blood from hosts such as people, pets and grazing animals (cows, sheep and horses). To draw blood, this fly painfully shreds the skin of its host with its razor-sharp proboscis.



Stable fly lifecycle: Look for larvae and pupae in the soil

- Stable flies breed in soil containing decaying organic matter, such as waste and reject vegetable produce, aged animal manure, or lawn clippings.
- Female stable flies lay eggs in soil near the rotting material. The eggs develop into larvae, then pupae, before emerging as adults that fly away to find host animals for a blood feed.

By managing waste and reject vegetable produce on your property, you are reducing the number of breeding sites for stable flies.

More information dpird.wa.gov.au/stablefly



Where do stable flies breed, and are they breeding in my soil?

- To check for stable fly breeding look for larvae in several sites where there is waste or reject vegetable produce (stalks, leaves and root stumps).
- Expose the material to sunlight and watch for larvae moving away from the light.
- To find pupae, scrape soil with a trowel or knife, digging 5-10 cm deep and wide.

If I find pupae - use an approved pesticide¹

If I find larvae - follow the control methods below.

How do I reduce stable fly breeding on my property?



Larvae in celery stump. The number of larvae in this small piece of celery multiplied over a field of waste celery stumps has the potential to produce over 100,000 stable flies

Within 2 days after harvest, remove all waste vegetation (leaves, stalks and root stumps) either by:

deep burial to a depth of 1 metre or

If waste material remains in or on the soil, **turn off all water irrigation**, then incorporate the waste vegetation into the soil by means of either:

- rotary hoe on 5 consecutive days OR
- counter rotating rotary hoe (aka a stone burier) then compact the soil using a land roller delivering 2.5 tonnes per square metre OR
- using a mouldboard plough then compact the soil using a land roller delivering 2.5 tonnes per square metre OR
- break up all vegetative material with a high-speed mulcher, flail mower or slasher and leave on the ground to dry out.

If fly larvae are present after 3 days, use an approved pesticide¹

- if a rain event occurs between 1 October and 30 April, within 7 days, the area must be sprayed to drenching with an approved pesticide and the site monitored each week for the presence of larvae.
- Any produce that is not suitable for sale must be, within 7 days, either
 - fed out to stock in thin lines no more than 35 cm wide and not more than 10 cm high OR
 - deep buried at least to a depth of 1 metre.

Your actions can make an enormous difference! Please help protect your community from stable flies by managing your waste and reject produce.

Important Disclaimer

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¹ see <u>https://www.apvma.gov.au/</u> for approved pesticides