

Guidelines for the production of land snails as food

Businesses that want to produce land snails as food are encouraged to adopt these guidelines and comply with all applicable legislation, including the Sale of Food Act to ensure food safety.

1. Premises layout and infrastructure

- Designated areas for production of snails, which is physically segregated from the areas for processing of snails as food.
- Designated areas for waste management and production of snail-derived products not meant as food eg. slime for use in skin care products so that they do not overlap with areas for production and processing of snails as food.

2. Farming Practices

a) Species of edible snails

• The species of snails produced should be those commonly consumed as food, eg. Cornu aspersum, Helix pomatia.

b) Quarantine of incoming stock

- Incoming stock of snails should be quarantined and monitored daily for mortality/morbidity.
 - Stock produced under controlled conditions at the source quarantine for at least 3 weeks before release for use in production of snails as food.
 - Stock harvested from the wild should be bred to the next generation, which can then be released from quarantine for use in production of snails as food.
 - In the event of a disease outbreak during quarantine, consult heliculture specialist for management of the outbreak. Promptly remove dead snails for biosecure disposal and notify SFA.

c) Personnel hygiene

- Implement hygiene procedures for personnel entering the production areas.
 - Clean footwear and gloves.
 - o Practise hand hygiene. Eg. hand washing, put on clean gloves.

d) Substrate

- Substrate used for production of snails should be screened or treated before use and should not be contaminated with any substances which may cause the snails to be unsafe for human consumption. Screening of substrates includes laboratory testing, inspections and verification by suppliers. Treatment includes sterilisation of substrates.
- Replace substrate regularly to prevent build-up of waste and pathogens.

e) Feed

- Manure, decomposing organic material and materials originating from diseased animals or fish should not be used as feed.
- For materials of ruminant origin, only deboned meat cuts and dairy (e.g. milk and cheese) products are allowed.
- Food waste used should not be in a decaying or decomposing state. There is a system in
 place to screen inputs into the waste stream, to ensure that the feed will not contain
 materials which are disallowed.

(Decomposing state is identified by putrid odours, mushy/slimy, or with visible mould or bacteria growth. Controlled fermentation is permitted).

f) Water

Use potable water for snail hydration and misting.

g) Monitoring of snail production

- Snail enclosures are well-drained to avoid waterlogging that will promote mould growth.
- Implement pest control measures to keep out pests from the production areas, eg. rats, wild snails/slugs, flies, birds.
- Inspect snails daily for morbidity and mortality and promptly remove dead/diseased snails. In the event of a disease outbreak, consult heliculture specialist for management of the outbreak and notify SFA.
- Regularly clean snail enclosures and equipment, to remove excreta, uneaten food and decaying matter. Clean and disinfect production facility floor surfaces daily to remove pests and droppings etc.

h) Post-harvest: purging of snails

• Place snails that have been harvested for consumption in clean, ventilated chambers for a period of 4-7 days without feeding to allow for emptying of their digestive tract.

3. Processing of snails for food

- Establish and implement HACCP plan for the production and subsequent processing of snails, with specific details of significant food safety hazards identified, the control measures for these hazards, identification of critical control points and limits, monitoring (inspection and laboratory testing) and corrective actions for deviations.
- Remove the hepato-pancreas before cooking as this organ accumulates heavy metals.
- Snails must be sufficiently cooked/boiled or otherwise undergo equivalent heat treatment at SFA-licensed food processing facility, to remove parasites or harmful microorganisms.
- There should not be any sales of live/raw snails to retailers or members of the public.

4. Record keeping

- a) Maintain daily records of inspections conducted and findings.
- b) Implement a batch coding system to track each batch of snails produced and processed for food.
- c) Keep records for at least 1 year.

References

- FAO (2013). Improved snail farming.
- Food Standards Scotland (2014). Guidance on producing snails for human consumption.
- EU Food Hygiene Regulations. Regulation (EC) No. 853/2004.
- Garkov, M. (2025) Land snail consumption: microbiological safety considerations, best practices and regulations.
- DAFF (2024): Importation of live garden snails (Cornu aspersum) for heliculture.
- SS 675:2021: Singapore Standard Specification for good agriculture practice.