



Screw Worm Fly Surveillance

Northern Territory Government
www.nt.gov.au/d/Primary_Industry



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Screw-worm fly is an insect parasite of warm-blooded animals. The fly has red eyes and a shiny blue-green body and looks similar to Australian blowflies. Flies lay eggs on the edge of open wounds from scratches, injury, branding, dehorning or castration.

Larvae (maggots) hatch and feed on the underlying flesh causing extensive tissue damage. Left untreated, animals can die from infection and loss of tissue fluid.

There are two species of screw-worm fly:

- Old world screw worm fly – *Chrysomya bezziana*
- New world screw worm fly – *Cochliomyia hominivorax*

Old world screw worm fly (SWF) is present throughout south-east Asia and Papua New Guinea and is one of the most serious emergency animal disease threats to the northern livestock industry.

SWF is a notifiable disease in the NT and suspect cases should be reported.

Monitoring wounds in livestock

To ensure early detection of a screw-worm fly incursion, it is important to check wounds on livestock for maggots. If you find maggots

1. Collect up to 10 maggots from deep in the wound with forceps. SWF larvae may be difficult to remove and burrow deeper into the wound when disturbed.

2. Collect larvae of different sizes if possible. Drop them in HOT water. This causes them to extend allowing better identification.
3. Place maggots in either (1) three parts methylated spirit to one part water; (2) 10% formalin; (3) 70% ethanol; or (4) vinegar.
4. Contact your regional office to identify maggots.

Northern Australia Quarantine Strategy (NAQS) conducts targeted quarantine surveillance along the northern coastline which includes:

- Fly trapping at airports, seaports and other risk areas
- Inspection of livestock vessels returning to Australia from overseas
- Sentinel cattle herds to monitor wounds for maggots

Fig 1 – Screw-worm fly *C. bezziana* ovipositing on edge of wound. Fig 2 – Larvae of *C. bezziana* feeding in deep lesion of host animal. Fig 3 – *C. bezziana* myiasis on foreleg of host. Fig 4 – SEM photo of head of Screw-worm fly, *C. bezziana*, larva – note mouth hooks.

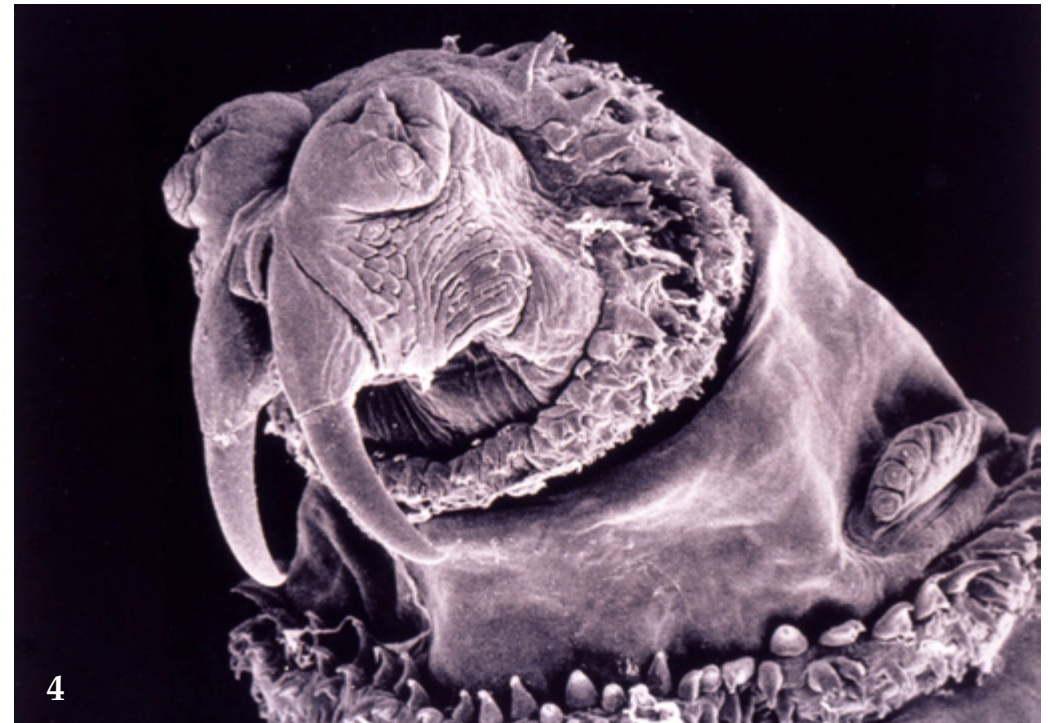




Fig 5 – Screw-worm infested scrotum of steer following castration



Fig 6 – Mature screw-worm larvae leaving the wound after feeding

Drop larvae samples off at your regional office...

Darwin Region – Berrimah Farm, Dick Morton – Phone 08 8999 2035 or 0427 003 600

Tennant Creek Region – Barkly House, Tom Haines – Phone 08 8962 4458 or 0401 113 445

Katherine Region – Katherine Research Station (KRS), John Eccles – Phone 08 8973 9716 or 0437 527 372

Alice Springs Region – Arid Zone Research Institute (AZRI), Peter Saville – Phone 08 8951 8181 or 0401 118 181

Alternatively send the sample to: **Berrimah Veterinary Laboratories, Makagon Road, Berrimah NT 0828** – Phone (08) 8999 2249

If posting larvae samples please use VINEGAR and post within 10 days of collection as formalin and alcohol have postage restrictions.

Fig 9 (right) – A goat being treated for a screw-worm (*C. bezziana*) infestation in Sultanate of Oman



Fig 7 – Screw-worm females ovipositing on edge of wound



Fig 8 – Screw-worm infested wound on cattle

