

Potential spread of pasture dieback in fodder

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Without precautions the fodder industry could contribute to the spread of pasture dieback across southern Australia.

Background

Pasture dieback is a condition killing large areas of sown and native pastures in Queensland. It was first observed in Central Queensland and has now spread to Far North Queensland and the NSW border. Suspected dieback was reported for the first time in northern NSW in autumn 2019.

The size of the areas affected by pasture dieback varies greatly. It starts as small patches in a paddock and can spread to affect whole paddocks. It is not limited to specific soil types or landscape classes. Livestock avoid grazing these areas making them unproductive.



Pasture dieback appears to be a complex interaction of multiple contributing factors including the environment. Mealybug is thought to play a role in causing pasture dieback however, this has not yet been confirmed.

Species affected

Pasture dieback affects summer growing grasses, both sown and native. It has not been reported in temperate grasses, with the exception of a single case of an annual ryegrass forage crop.

Sown species known to be affected include:

- Buffel grass (*Cenchrus ciliaris*)
- Digit grass (*Digitaria eriantha*)

- Rhodes grass (*Chloris gayana*)
- Green and Gatton panic (*Megathyrsus maximus*)
- Bambatsi panic (*Panicum coloratum*)
- Kikuyu (*Pennisetum clandestinum*)
- Paspalum (*Paspalum dilatatum* and *P. plicatulum*)
- Creeping bluegrass (*Bothriochloa insculpta*)
- Sabi grass (*Urochloa mosambicensis*)
- Signal grass (*Brachiaria decumbens* syn. *Urochloa decumbens*)
- Para grass (*Brachiaria mutica* syn. *Urochloa mutica*)
- Setaria (*Setaria sphacelata*)
- Purple pigeon grass (*Setaria incrassata*)
- Forest bluegrass (*Bothriochloa bladhii* ssp. *glabra*)
- Indian couch (*Bothriochloa pertusa*)

Other species known to be affected include:

- Black spear-grass (*Heteropogon contortus*)
- Forest bluegrass (*Bothriochloa bladhii*)
- Golden beard grass (*Chrysopogon fallax*)
- Giant rat's tail grass (*Sporobolus pyramidalis*)

There are potentially more grass species that could be affected.

Hay – spreading pasture dieback

Several separate cases have occurred in Queensland involving producers purchasing hay and then finding dieback around the area hay was stored on farm. Fragments of hay coming off trucks during transportation also has the potential to spread pasture dieback. Pasture grass hay has a higher risk of carrying pasture dieback than non-pasture grass hay such as lucerne. While lucerne is not affected by pasture dieback, it is unknown if it can carry the condition, especially if stored with dieback affected grass hay.



Buyer beware

The NSW government is not restricting the movement of fodder from Queensland to NSW. In addition to the usual biosecurity measures to minimise weed risk, they are advising producers to source hay from dieback free areas and/or dieback resistant crops such as lucerne. Ask questions about the source of the hay before purchasing.

Recommendations

Producers

- Do not bale and sell dieback affected pastures
- In known dieback areas, grow non-grass fodder
- Regularly check areas where hay and/or fodder have been stored and fed out for dieback symptoms
- Keep records
- Report any suspected dieback to **Exotic Plant Pest hotline 1800 084 881**

Contractors

- Only conserve grass pastures in dieback free areas
- Thoroughly clean down equipment between properties and monitor clean down points for pasture dieback
- Keep records
- Report any suspected dieback to **Exotic Plant Pest hotline 1800 084 881**

Transport carriers

- For distribution in NSW, preferentially source hay from dieback free areas
- Cover loads
- Clean truck and trailer/s between loads and monitor clean down points for pasture dieback
- Keep records
- Report any suspected dieback to **Exotic Plant Pest hotline 1800 084 881**

Storage facilities

- For distribution in NSW, preferentially source and store hay from dieback free areas
- If sourcing hay from pasture dieback areas, store and distribute separately to hay from pasture dieback free areas
- Store grass hay separately from other hay. Maintain these areas for grass hay only and monitor for pasture dieback
- Clean truck and trailer/s between loads. Monitor clean down points for pasture dieback
- Keep records
- Report any suspected dieback to **Exotic Plant Pest hotline 1800 084 881**

The NSW Government is NOT restricting the movement of fodder from Queensland to NSW but asks that care is taken to minimise the spread of pasture dieback and weeds.

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