

Looking for pathogens: nassella tussock

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Helping us find diseased Nassella tussock plants

- Fungi, although tiny, are relatively easy to spot if you're looking close up at a NT – they can be lesions (spots) on the plant, have varying patterns and colours. Sometimes it looks 'fluffy' and sometimes it smells really strongly like mushrooms.
- **Basically, if there's anything out of the ordinary on your tussock there's a chance that might be fungi.**
- Noticed an area with tussocks not as persistent as they used to be, or they're looking more unhealthy or diseased in an area where they used to look healthy? - **WE ARE INTERESTED.**
- Please avoid searching for fungi on NTs that are dying or healthy due to being sprayed as this indicates that fungi is saprophytic – i.e. it feeds on dead material and is probably a decomposer – therefore not suitable for biocontrol of healthy nassella tussock.
- Following are some fungi found on nassella tussocks and it is **not** an exhaustive list of all the possible fungi that could be on the tussocks. We are wanting to survey as many properties as possible.
- If you spot something different to what is described or pictured, or even what is pictured here, we are very interested in seeing it! So if you'd like to take a photo of it you can email it through to BrooksA@landcareresearch.co.nz or pop the sample into in a plastic Ziplock bag and an envelope (must be double bagged) and send it to:

• **Amber Brooks, Landcare Research, PO Box 69040, Lincoln 7640**



White mycelial mass- easy to pull out; often associated with “mushroom” smell

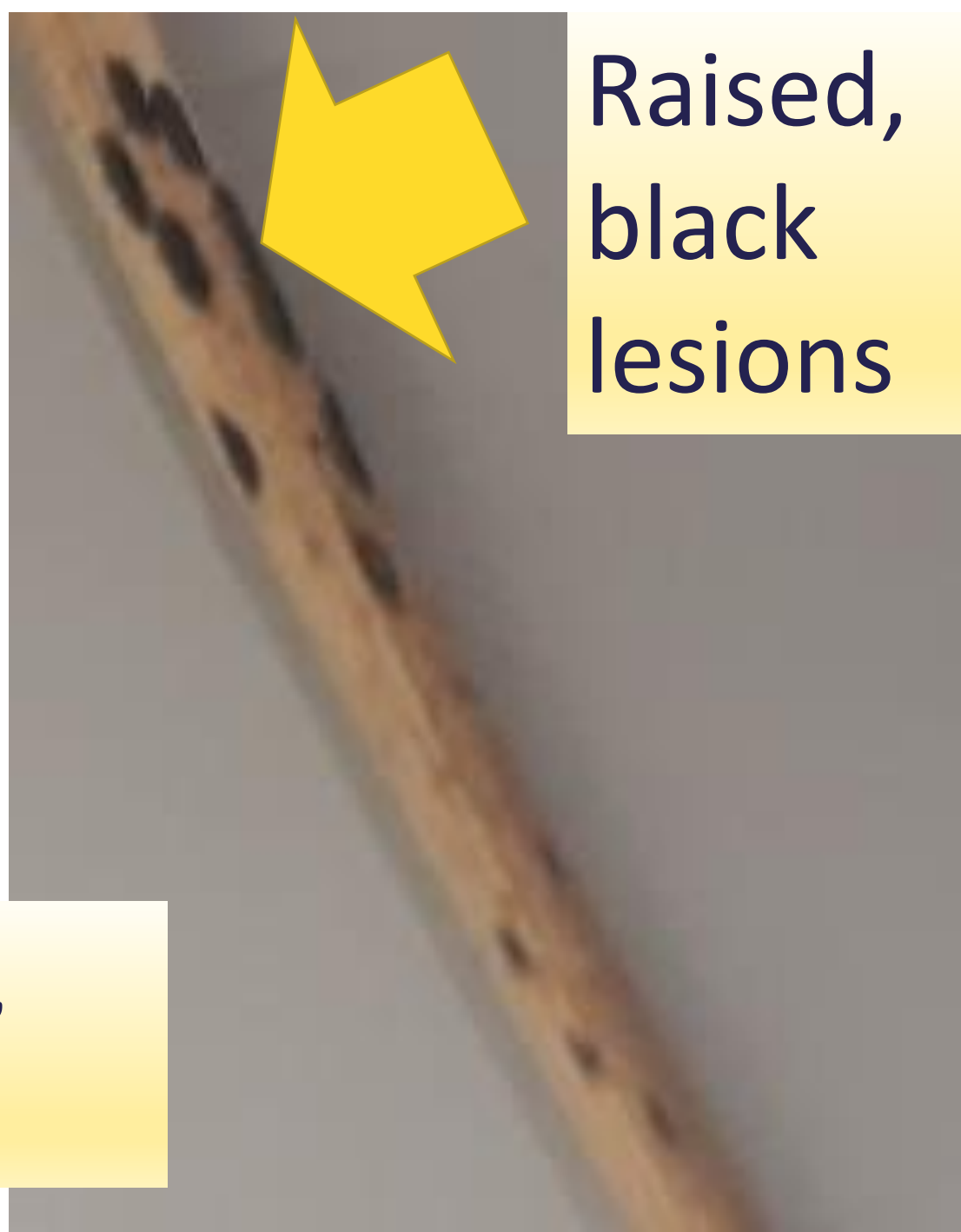
White mycelium indicated by arrow



Within and on inflorescences; on seeds



Aborted seed, black "spots"



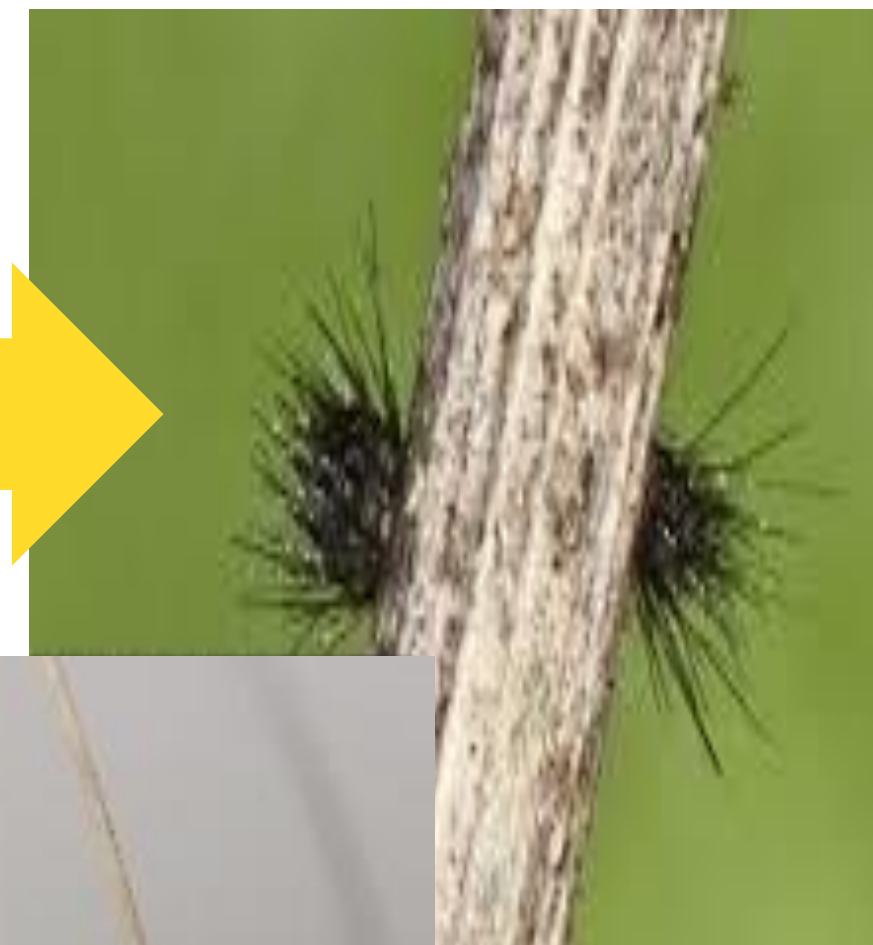
Raised, black lesions



smut fungus infecting NT seed head in South America

Leaf material; dying or starting to die

Fungal fruiting body



Fruiting bodies

Discolouration of leaves



Rust in Argentina; NZ??

Puccinia nassellae - CNG



Uredinia on *N. neesiana* (site NT 27)



Telia on *N. neesiana* (site NT 16)

1/04/2014

TT biocontrol talk

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Anderson (2005a)

Prospects for biological control of serrated tussock and Chilean needle grass

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