Post-Fire Epiphytic Orchid Surveys Four Australian Cinderella Orchids

(that live not in the ground)

Who are they?



Are they OK?



JJBotanics

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Target, assess, review, report & more!

☐ Aim: pre- & post-fire status of 4 epiphytic/lithophytic orchids

☐ Sites: Northern Tablelands & North Coast of N.S.W.



Adelopetalum argyropum



Plectorrhiza purpurata



Sarcochilus aegualis



Tropilis angusta

Adelopetalum argyropum

(=Bulbophyllum argyropus)

☐ Grows ± exclusively on

Exocarpos cupressiformis

☐ Populations decimated; some with most hosts killed

☐ TYPE Norfolk Island

☐ NSW plants morphologically distinct

☐ DNA analysis...



- ☐ Grows mostly on

 Leptospermum polygalifolium,

 also on Coprosma quadrifida
- ☐ Populations mostly decimated; some with most hosts killed



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Sarcochilus aequalis

☐ Grows ± exclusively on rocks

☐ Populations decimated





Tropilis angusta

(=Dendrobium aemulum sens. lat.)

- ☐ Grows ± exclusively on
 - Allocasuarina torulosa
- ☐ Populations damaged by fire & looting
- ☐ Taxonomic limits within
 - D. aemulum complex unclear
- ☐ DNA analysis...



Extinction risk assessment

- ☐ 'Common Assessment Method'
- ☐ IUCN best practice
 - Categories (CR, EN, VU)
 - Criteria (A, B, C, D, E)
- ☐ Assessment based on:
 - Population size
 - Distribution
 - Decline





Preliminary extinction risk assessment

ENDANGERED

Adelopetalum argyropum

- Pop. reduced
- Range limited
- Tax. in prep.

ENDANGERED



Plectorrhiza purpurata

- Pop. reduced
- Range decline

ENDANGERED



Sarcochilus aequalis

- Pop. reduced
- Range decline

ENDANGERED



Tropilis angusta

- Pop. reduced
- Pop. gen. started

Where next?

- ☐ Nomination to NSW Scientific Committee
 - Recommendation in prep.: "Endangered"
- ☐ Leaf samples to CNS for molecular analysis:
 - Adelopetalum argyropum
 - Tropilis angusta





JJB

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