

April 2005

DACTYLANTHUS TAYLORII Recovery Group meeting 12th October 2004 Mt Bruce, Wairarapa

The Dactylanthus Recovery Group met late last year in the Wairarapa. We spent one day discussing our year's work on dactylanthus and editing the next recovery plan and one day checking out a population of dactylanthus on a private farm (the landowner came along for the day too which is great).

The new dactylanthus Recovery Plan has been the focus of our last two meetings. It has been widely circulated for review, and is now thankfully with DOC Head Office for publication by June this year.

Highlight: The seeding trial in Waipapa is going well - last year we reported germination in some plots after 4 years - now many more plots have germinated (a 350% increase from last year in fact).

Te Araroa Dactylanthus Restoration project

Graeme Atkins has had huge success at Te Araroa with dactylanthus protection. Not only has he devised the "Atkins Technique" (see insert box) whereby possums are used as survey tools, but there are impressive numbers of seed now added to the seed bank. Since 1996 when 241 caged plants set seed there has been a massive increase to 2003 when 660 caged plants set seed. With 3660 seed per (well pollinated) inflorescence - that's great news for population health.

Kiore Poison Operation Little Barrier Island (Hauturu)

Last year in June two aerial drops of talon (brodificoum) bait were used to attempt to eradicate kiore from Little Barrier Island. If this is successful (and this is only confirmed after no rats have been detected for two years) then the dactylanthus is finally free of this browsing pressure. Kiore ate off the flowers thereby preventing normal seed production.

If the kiore are gone it means Little Barrier will be the only totally predator free dactylanthus site. The pollinator of dactylanthus (the short tailed bat) and the host trees are also free of this threat so now we have a predator free system where natural pollination can occur and hopefully plenty of actively regenerating host roots for dactylanthus seed to attach to.

The Atkins Technique

Developed by Graeme Atkins at Te Araroa the "Atkins Technique" is a method of using cyanide to kill possums and locating dactylanthus bracts inside the animals stomach (a 'positive' possum) has been documented in a report. Ask your local DOC contact for a copy.

The New Zealand Plant Conservation Network website has many photos of dactylanthus. Go to <u>www.nzpcn.org.nz</u> and click on "search for a threatened species", enter "dactylanthus" into the search field. The dactylanthus page is one of the most popular species visited on this site.

New report

A.S. Holzapfel; J. Dodgson . 2004. Experimental seeding trials for the root parasite *Dactylanthus taylorii*. DOC Science Internal Series no.173

Either contact your local DOC office for a copy of download on the DOC website http://www.doc.govt.nz/Publications/004~Science-and-Research/DOC-ScienceInternalSeries/PDF/dsis173.pdf

New population of dactylanthus at Waikaremoana!

50 plants have been found by Dave King in a new population near the lake. The hosts (*Pittosporum ralphii*) koru or karo, are young and numerous and the habitat is probably maintained by wind events buffeting the area during northwesterly blows.

The dactylanthus plants are healthy with a relatively low proportion of dead plants but possum digging and damage is obvious.

Caging of as many plants as possible is planned so as to protect them from possum browse

Pigs - a real problem

Pigs are a real threat to dactylanthus as they root out the tubers killing the whole plant. When other predators (e.g. rats, possums) are under control e.g. Te Araroa it is noticeable how much damage pigs do. They are also a nuisance as they destroy cages designed to protect the plants from possums.

The Dactylanthus dog - Mohiti & her owner Graeme Atkins

Graeme has trained his dog to find dactylanthus. The pair are a team with Graeme locating dactylanthus bracts inside an animal like a pig or a possum. Mohiti then sniff's the scent and runs off to find the plant.



Thanks for your interest in Dactylanthus- remember to contact your local DOC Office to see when volunteer surveys are planned if you would like to be involved. Editor of newsletter: Bec Stanley (<u>rstanley@doc.govt.nz</u>). Recovery Group Leader: Graeme La Cock (<u>glacock@doc.govt.nz</u>).

Local DOC contacts for Dactylanthus: Steve McManus (Northland), Rebecca (Bec) Stanley (Auckland), Andrea Brandon & Avi Holzapfel (Hamilton), Paul Cashmore, (Bay of Plenty), Dave King & Graeme Atkins (East Coast Hawkes Bay), Graeme La Cock (Wanganui), Nick Singers (Taupo-Turangi), Tony Silbery (Wellington).

To e-mail any of us use our first initial and last name (as one word) and add suffix "@doc.govt.nz" e.g. <u>pcashmore@doc.govt.nz</u> is Paul Cashmore's e-mail.