

Diuris Rescue Project

Diuris behrii

Sponsor: Hillgrove Resources

Kanmantoo SA

Diuris behrii



*This project started in winter 2011
before mining of new areas commenced.
75 flowering diuris plants were marked
with stakes in August.*

*The orchids were rescued from the mine
site on 14 October 2011 by Hillgrove
Resources Environmental staff assisted
by members of the local Land Care
Group. All of the orchids remain the
property of Hillgrove Resources Ltd.*

NOSSA was asked in early 2012 to cultivate and try to propagate this orchid which has a State rating of vulnerable.

I put up my hand to look after the orchids as I had space in the newly relocated Wells shadehouse.



*Rescued orchids in 105 bags at
Cooee Nursery May 2012*



Their new home in The Wells shadehouse May 2012

*After delivery
and weeding
May 2012*





More bags



65

67

68

69

70

71

72

73

74

75

76

77

78

79

80

82

83

84

85

88

87

86

89

93



Of the 99 *Diuris behrii* clones
collected from the mine site

only 76 clones came up in
the bags in 2012

Some bags held several plants

Growing Season 2012

A variety of plants came up in the bags.

Twelve diuris plants flowered.

10 flowers were hand pollinated

Nine seed pods were harvested.

Some plants had their tubers removed.

The orchids were moved to plastic pots.

31

August 2012



Aug 2012

32



Kanmantoo soil



Growing Season 2013

344 diuris plants came up by July.
A few struggled to reach the surface
& needed help.
38 plants flowered.
4 flowers were hand pollinated

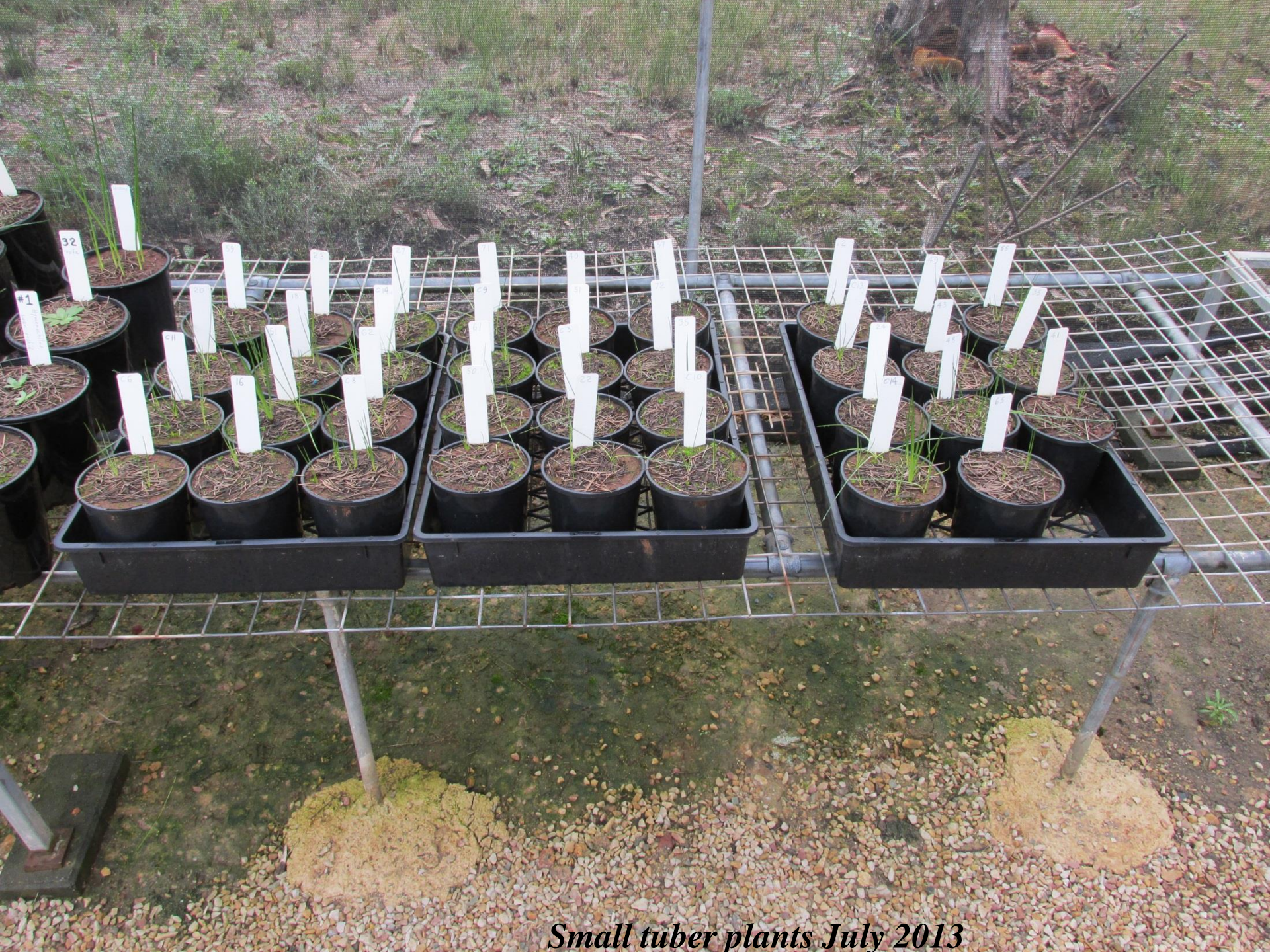




Mother clones July 2013

*Daughter
plants for
replanting
July 2013*





Small tuber plants July 2013





Empty bags July 2013



Mother Clones Sept. 2013



Daughters Sept 2013



Sept. 2013

*3 flowers on the
strongest plant 2013*





Sept. 2013

Sept. 2013



*Tuber removed
plants Sep 2013*



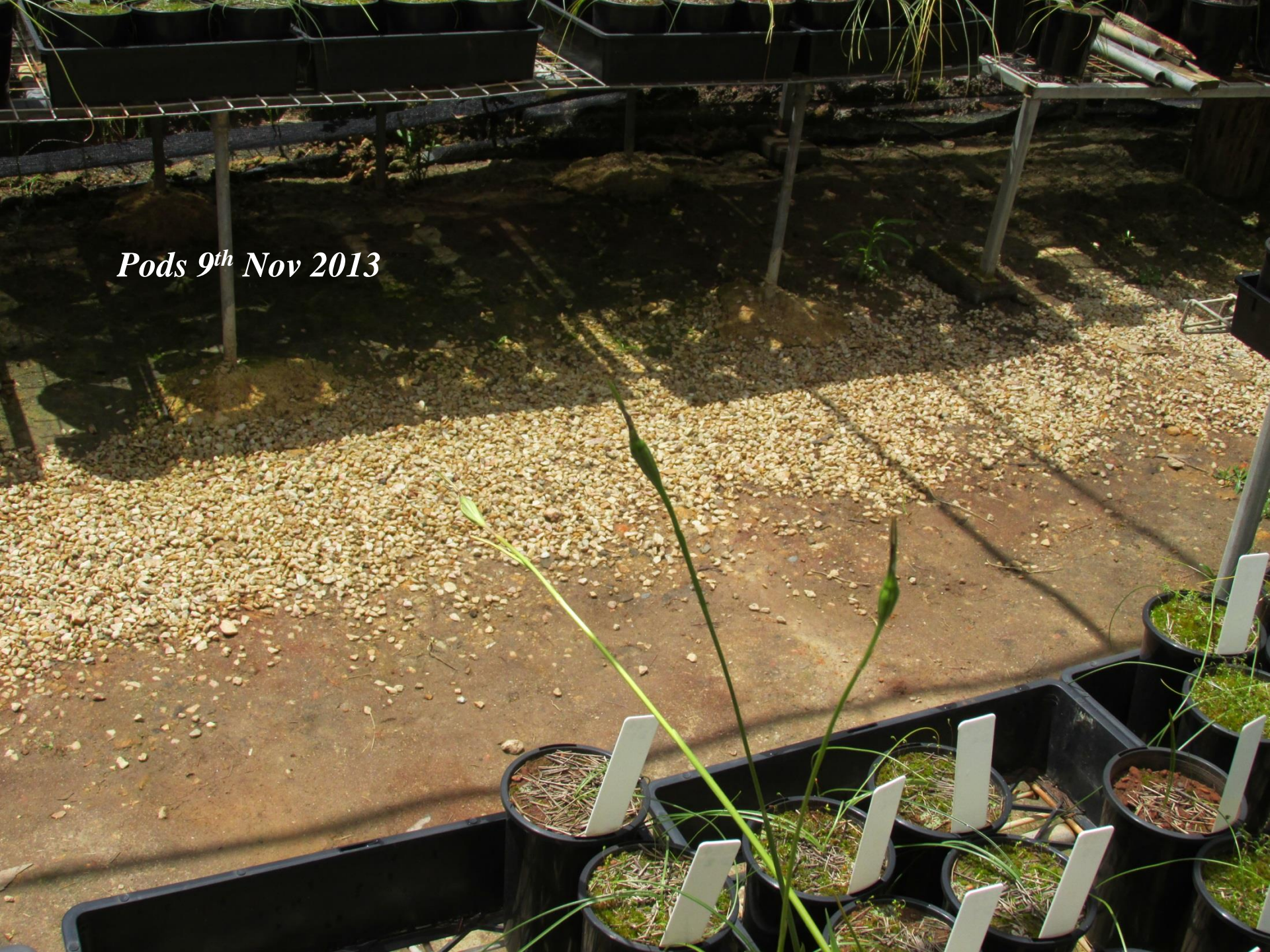
Microtis parviflora ?
Oct 2013





Seedlings Oct 2013

Pods 9th Nov 2013



Diuris behrii pod





Tuber removed plants Nov 2013



18

C18
D10

Seedling
?

C31
D1

#1

C32
biseta
?

67

#6

#1a

hypocistis

Seedlings
?

43

Repotting late 2013

All of the mother clones and last year's daughter tubers were repotted by mid December.

*Dormant daughter plant
after flowering*



And another



A photograph showing a small, light-colored tuber, possibly a sweet potato or yam, lying vertically in the center of a metal strainer. The strainer is filled with dark brown, moist soil. The strainer has a grid of square holes. The entire assembly is set against a dark, metallic background, likely the interior of a pot. The text "New tuber" is written in a white, italicized font across the middle of the image, positioned over the tuber and the soil.

New tuber

Tuber half buried in clay soil



Topping sandy soil mix

C82
D2



C82
D2





Old & New tuber

Tuber removed plants



Extra tubers formed







*Small tubers into
125mm pot*



Daughter Tuber Report - 31 Dec 2013

[illegible]

After December 2013 repotting

- 73 mother tubers
- 249 daughter tubers
- 280+ small tubers
 - 30+ seedlings
- Total tubers = 632+

The seedlings

- Seedling tubers were smaller than a grain of rice.
- The seedlings are new clones.
- If they survive dormancy and grow large after several years they will become mother clones.
- Seedlings will more than replace the “lost” 26 clones.

3 diuris seedling tubers



What will 2014 bring?

More orchids?

More flowers?

More seedlings?

Fire, storm, flood, pests or disease?



First leaves
31 Mar 14



Seed was sprinkled on all pots at
the end of April

New bench April



Growth starting mid April



30th April 14



30th April 2014



317 plants visible

at the end of April 2014

Expecting 600+ by July

452 plants in leaf on 23rd May

70 clones/73

232 daughters/249

138 smalls/280

12 seedling leaves/30

More leaves expected in June

9 *Pterostylis* plants are visible

The Diuris Rescue Project will go for 10 years.

- Success is exciting
- Could result in 1000's plants