

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS
CALYTRIX STUDY GROUP NEWSLETTER NO.14.
JULY 1999

Dear members

As promised here are the results of seed trials by Esma Salkin

Calytrix acutifolia Item 1656 N/C-01718

- 1) Good supply of seed so 20 seeds soaked overnight & then dissected
11 seeds floated 9 sank
17 Embryos assumed dead, all embryos brown
3 Embryos were white and assumed to be potential viable
 - 2) CONTROL - 25 seeds. - No pretreatment Sown in seed mix
 - 3) Pretreatment Soaked in water + 1 drop detergent - 24 hrs, then SISP* 24 hrs.
 - 4) Pretreatment Soaked in water + 1 drop detergent _ 24 hrs, then GA₃ 50 parts/million
- No germination:-
Seed Sown 9/7/98 on seed mix coarse gritty sand 3 parts, 1 part Coco peat
Pots put out in rain initially and then placed in polyhouse and hand watered

Calytrix aurea Item 654 NS - 12009

Pretreatment

18 seeds soaked in water + 1 drop detergent - 24 hrs. Then SISP - 24 hrs.

18 seeds soaked in water + 1 drop detergent - 24hrs. Then GA₃ (50ppm.)24hrs

Seed sown on 9/7/98

SISP Germination 1 on 29/9/98

Post Mortem on remaining seed in pot on 10/12/98

13 seed recovered

SISP 10 embryos dead (brown)

3 seed resown and left to dry out over summer

No germination 13 seed recovered from pot

GA₃ 12 embryos rotted

1 wizened

*SISP Kirstenbock Smoke Papers

1 paper dissolved in 50ml. water and solution used

Calytrix flavescens Item 656 NS - 11706

30% of seed unusable

10 seeds seed coat split

1 seed insect damaged

Seed sown as above - Pretreatment as above

SISP

20 seed sown 9/7/98

1 seed germinated 16/9/98 (cont. page 2)

Post Mortem

13 seeds recovered and dissected

Most no embryos

2 seeds with withered embryos

GA3 - not done not enough seed

Calytrix glutinosa Item 657 NS - 1343

Seed clean no evidence insect damage or other type of damage

Pretreatment

No germination - Post Mortem

SISP method as above

GA3 13 seed recovered

20 seed sown 9/7/98 No germination

11 seed - All dead

Post Mortem 17 seeds recovered

1 seed with root radicle

14 embryos, rotted

1 put back to dry out

1 embryo white ? viable

3 seeds resown to dry out over summer

Discussion

I didn't do a post mortem on C. acutifolia as seed too small to recover. I did find 3. I excised one it had a ? healthy embryo. This seed is still very hard. I'm keeping the pots and treating as above next season.

Seedlings

C. aurea & C. flavescens have been very slow to grow and are barely 2.5cm. high 2 months after germination. I've only recently potted them on into soil.

Given the number of seeds with dead or ? malformed embryos, It may suggest that few seed produces a potentially viable embryo.

I also suspect seed is old because when seed did germinate growth was slow. C. glutinosa did produce one seedling with a root radicle, but growth hormone to initiate apical growth was either not present or in low proportions - another indicator of old seed perhaps.

Do other members have more success with fresh seed?

(Perhaps members growing from seed could respond to this query, Ed.)

Calytrix plants in my garden overall are growing slowly, but site and aspect in garden may be the main reason they are not progressing. They have been sited where other species have not succeeded.

C. angulata. produced a terminal head of flowers but is struggling near Eucalyptus wimmerensis I gave it a special dose of fertilizer and watch for an improvement and hopefully seed.

C. harvestiana grew well over the first year in its large pot. At the end of the second year ,its not looking so well. I haven't tried it in the garden yet as down here it is not recommended.

Cuttings so far have not been successful, but most other species are easy from cuttings.

Calytrix in garden.

C. sullivanii pink.

C. sullivanii prostrate

Nursery Collection.

C. angulata

C. glaberima

C. sullivanii pale pink floriferous -SAA. Cuttings collected 1997.

C. tetragona Deep pink Naracoote - S.A. " " "

I also have cutting grown seedlings of

C. leschenaultii

C. fraseri

Nurseries down here don't carry many Calytrix.

I didn't see one Calytrix species on our last trip to N. N.S.W. & S. W. QLD.

We were only away 2 weeks driven home by wet weather.

Norma Boschen writes that after potting on her Calytrix fraseri which didn't shoot at all, it died. (The same thing happened to ours, but fortunately we have good roots on one of our cuttings, plus a pot of cuttings still looking good. Ed.) The right mix seems important for this one. We are trialling the rooted cutting in our new cutting mix to date this is looking good. Regarding new mix see our cuttings experience later in the newsletter.

OUR SEED TRIAL RESULTS.

We trialled one small packet of commercially purchased seed we had in stock. All seeds were watered in with 2 applications of smoked water. (REGEN 2000(r) SMOKEMASTER concentrated smoked water diluted to instructions.) Then pots transferred to bog method and placed on a shaded sill in the garage facing SE. the only position available

Calytrix acutifolia Item 1656 n\c 01718

Seed sown 12\2\99

No Germination

Calytrix angulata Item 653 NS -9796

Seed sown 12\2\99

Germination 1 on 17\3\99

3 by 2\4\99

Calytrix aurea Item 654 NS-12009

Seed sown 12\2\99

No Germination

Calytrix carinata Item 3653 NS-17151

46 Seeds sown 12\2\99

Germination 3 on 5\3\99

8 by 12\3\99

10 by 22\3\99

1 Potted up it died

1 Rotted

8 Still remaining in July

Calytrix extipulata Item 655 NS- 4757

Germination 1 on 14\3\99

3 by 30\3\99

6 by 17\4\99

3 remaining in July

Calytrix flavescens Item 656 NS-11706

34 Seeds sown 12\2\99

Germination 1 on 10\5\99

Calytrix fraseri Item 3129 NS- 12353

Seed sown 12\2\99

Germination 1 on 16\3\99

2 by 19\3\99

3 by 22\3\99

6 by 30\3\99

8 by 17\4\99

1 Rotted 7 still remaining in July

Calytrix glutinosa Item 657 NS-11343

Seed sown 12\2\99

Germination 1 on 17\3\99

4 by 19\3\99

5 by 30\3\99

6 by 3\4\99

8 by 17\4\99

2 Rotted 6 still remaining in July

Calytrix leschenaultii Item 658 NS-1148-11405

150 Seeds sown 12\2\99

Germination 6 on 30\3\99

13 by 4\4\99

24 by 17\4\99

11 Lost through damping off

See note on treatment

We have had good success with cuttings this year as follows.

Calytrix aurea 16 from 16 cuttings

Calytrix variabilis 8 from 8 cuttings

We used the hormone 'ROOTEX' at the recommended strength and sprayed all cuttings with Yates 'STRESSGUARD' also at the recommended strength.

The cutting mix we are having the most success with is 50% vermiculite & 50 % perlite

We are using the same mix when we pot up and the plants are all doing fine.

Seedlings which were looking a little yellow we sprayed with iron chelates and Seasol and have noticed a great improvement. These trays we brought inside to a central heated room during the daytime the heat is turned off at night but this doesn't seem to have been detrimental to the condition or growth of them. We plan to grow them on for a while and then take cuttings from the top growth

Unfortunately our records show some members have not paid their fees for 1998\99. If there is a red cross at the bottom of this page in fairness to financial members we regret this will be your last newsletter. Fees for 1999\2000 are now due and we look forward to hearing from all of you.

