

DODONAEA STUDY GROUP



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DODONAEA
VISCOSA SSP. ANGUSTISSIMA

Dear Members,

I've been potting on plants during the past week or two and I have lots of Dodonaea tepperi, D. megazyga, D. sinuolata ssp. acrodentata, D. procumbens, D. hirsuta and D. ceratocarpa, so I hope that I can find homes for them in Tassie gardens and get some feedback on their horticultural requirements. I also have plants grown from seed bought from Nindethana labelled D. juncinifolia. This name doesn't exist in literature, I believe, so I'm hoping that I can identify them for Nindethana. I tried once before but none of the seedlings survived.

The A.S.G.A.P. Conference and Seminar held here in January was a great success and it is a very rewarding experience sharing activities, lectures and discussions with so many beautiful SGAP people. They visited our garden, so I was able to show off my Dods, few of which were exhibiting their fruits at the time. After this outing Judy West presented a paper on 'Dodonaea in the Wild'. This was an excellent talk and I learnt quite a lot from it. I taped Judy's talk and had planned to quote from it, but I have temporarily mislaid it so this will have to wait until another time. However I will include a copy of the abstract that was printed with the seminar papers.

A few members of our study group were at the seminar: Doris Gunn, Marion Simmons and Irene Cullen, our representative for the Queensland Region. We warmly welcome new members to our group:- Elizabeth George, from W.A., Merv Hodge, from Qld., and Fred Rogers from Victoria. We had a Study Group Leaders meeting and Barbara Daly, our Study Group Co-ordinator had put a lot of thought and work into her report for the Conference and for this meeting and it stimulated much discussion. It was proposed that the Study Group Co-ordinator should be a member of the ASGAP executive and this was passed subject to confirmation by our public officer. Barbara has resigned and we do thank her for her diligence and support over recent years. Jan Sked of Queensland was elected to fill this position and we extend to Jan a very warm welcome. Whilst mentioning elections, I should report that I was elected ASGAP President, Marion Simmons ASGAP Secretary and Sue Collier, Treasurer. It will be a busy two years for the executive but I think that we will enjoy it. The minutes from the Conference aren't available as yet but many other matters were discussed - mostly dealing with administrative matters such as funding of study groups, assistance to newly formed groups and funding of special projects such as publishing of books.

Our new member, Merv Hodge presented a very interesting paper and demonstration of his successful techniques with grafting. Merv and his wife Olwen stayed with us for a few days after the Post Conference tour and I was given a personal lesson and demonstration. Merv grafted a number of Grevilleas onto Grevillea robusta stock; Nothofagus gunnii (Tasmanian endemic deciduous Beech) onto Nothofagus cunninghamii; Lagarostrobos franklinii (Huon Pine) onto an exotic cypress; and

Dodonaea tepperi onto D. ptarmicifolia; D. multijuga onto D. rhombifolia; D. filiformis onto D. rhombifolia; D. filiformis onto D. multijuga; and D. tepperi onto D. rhombifolia. Only Grevillea acanthifolia, onto G. robusta has really got away so far, but none of the other scions have died, so I'm still hoping. I would like to try grafting female Dods onto male Dods, to ensure the colourful fruit. I plan to do this when time and suitable materials are available. This could be quite a breakthrough. The technique is fiddly so I hope that my clumsy fingers can be trained.

Doris Gunn presented an evening session with slides on the lovely Kevin Hoffman streetscapes at Lara, near Geelong in Victoria, ably assisted by her husband Bill.

Dorothy Perret from W.A. offered to do what she could to obtain some material of the lesser known Dods from W.A., so I have sent to her descriptions and illustrations of these Dods and she will enlist the help of W.A.W.S members who live in the relative areas. Thanks to Dorothy and goodluck.

During a restful week at Coles Bay recently, I wrote this report which may be of interest to you.

LONG MARSH DAM

Some years ago, I was given seed of D. filiformis which a Tasmanian member, Margaret Allan had collected at Long Marsh Dam. Since then I have made enquiries and it appears that Long Marsh Dam had a mysterious and fascinating past. About three years ago, my husband and I tried to find this site, but got thoroughly misled (not lost) on forestry roads and thoroughly bogged on one of them. We did manage to find a few plants of D. filiformis, Tassies endemic Dod, near a forestry bridge over the Macquarie River, but no dam!

During February this year we had 8 wonderful restful days at the coastal resort of Coles Bay on the Freycinet Peninsula; camped with our Kombi campervan in a secluded site among the sand dunes, along with other campers, wallabys, possums, native hens, blue wrens, sea gulls, pacific gulls, skinks and ants.

One day we decided to try once more to find Long Marsh Dam. We headed out early armed with a 'mud' map, some photocopies of articles relating to some of the facts and the history of Long Marsh Dam and much determination. On the map it is situated about 20 kms west, as the crow flies, from Swansea. Swansea is about half way up the east coast of Tasmania. It was a lovely day as we drove west nearly to Lake Leake, then headed south on the 'M' forestry road. Our mud map told us to travel about 22kms down the 'M' road and turn into 'M16' passing 'M16.1' on our right, 'M16.2' on our left and turning onto 'M16.3' on our right. 'M16.3' didn't have a signpost but we decided to give it a try. About 1.7kms down we were to turn onto a 4 wheel drive track and watch for a large cairn. When my husband reads '4 wheel drive', he immediately interprets this to mean 'Kombi'. This interpretation on our previous trip meant some hours of digging out mud, laying rocks and branches and swearing!!! We drove down this track a kilometre or so and then I decided it definitely didn't mean 'Kombi', so we left the van and walked, past the cairn (we must be on the right track) and down to the river, where we found the Rivers and Water Supply Commission had a small weir and gauging station, but not the dam we were looking for.

Another look at our mud map showed a faint arrow, which indicated that we probably should have turned off at the cairn. We retraced our steps and headed along a barely discernable 'pad' and after a short time found a recently erected sign 'Historical Site - Please Do Not Disturb'. This was quite unexpected as we were walking through fairly dense eucalypt forest with an understory of Acacia dealbata, Banksia marginata, Hibbertia, Lomandra etc. in a reasonably remote forestry concession.

As we headed down the slope and over a sort of quarry wall, Don espied our first Dodonaea filiformis, these were no more than a metre high and no sign of flowers or fruit. But lower down the slope we found mature shrubs some up to 3 or 4 metres tall, the females with masses of dry papery fruit along the older branches. This species is listed as rare and endangered and is found in isolated pockets in various situations mostly near rivers. This varies markedly from the other Tasmanian species Dodonaea viscosa ssp. spatulata in that the fruits are smaller and the leaves terete or filiform (needle-like) to 2cm long and crowded up the branches. This is the largest and most vigorous population of this species that I have seen anywhere.

We then moved on down the slope and came upon the huge abutments of the Long Marsh Dam. These rise 18 metres on either side of the Macquarie River and go back about 20 - 30 metres to the slopes on either side of the river. These were built by convict labour in the 1840's from nearby stone and are now clothed with dry sclerophyll forest. We then scrub bashed down to the river and managed to cross on rocks and overhanging branches to the northern side where we climbed the abutment and found lots more D. filiformis, also small gems such as Pterostylis sp., Caladenia sp., Brachyscome sp., Goodenia lanata, Cotula sp., and Wahlenbergia sp. in flower.

We also found the remains of a road, another quarry, many buildings, which were part of the old station and settlement and a cemetery with one grave and a headstone which read 'Sacred to the memory of Thomas Collins aged 36. Killed by a falling stone on 4th December, 1843, whilst building the Long Marsh Dam'.

We spent a couple of hours exploring this amazing historical site before returning to our van with a handkerchief full of Dod seeds and capsules. Our notes told us that in November 1840 it was proposed to build the dam at least 18 metres high, which would flood an area of up to 160 hectares for an irrigation system in the Ross-Tunbridge-Campbelltown area. Barracks were erected to house 250 men. By September 1843 there were 147 probationary convicts at work and records show that in 1844 there was a school. In January 1844 regulations were brought in that now convicts had to be paid for the work they were doing. It was calculated that £8000 would be barely enough to complete the dam and a further £8000 was needed for works to convey the water to the lands to be irrigated. Hence the project was abandoned.

FINANCE

	Receipts		Expenditure
Subscriptions	43.00	Postage	16.76
Donations	45.00	Stationery	7.12
B/F	<u>64.91</u>		
	80.00 152.91		<u>23.88</u>
In hand	\$129.03		

NEWS FROM MEMBERS

Hugh Stacey writes that he lost several D. triquetra plants in a burn off 3 years ago, but a couple have now re-appeared from seed. D. pinnata is growing very slowly. Hugh also sent photocopies of the pages covering Dodonaeas from the new book 'Native Plants of the Sydney District' by Fairly and Moore. He asks if we have found evidence of Ph requirements for Dods. Perhaps some members would like to comment on this.

Lawrie Whitmore sent me a specimen for identification. He labelled it D. inaequifolia but I believe it to be D. sinuolata ssp. sinuolata.

Irene Champion sent 2 slides of D. uncinata for our slide bank. Thanks to Irene. She has had confirmation that the Dod that she collected at Glen Geddes is D. lanceolata var. subsessilifolia. That has solved that query.

I would like to thank N.S.W. Region for their donation of \$50 for the past two years. They plan to give all study groups \$25.00 per year, which will be a big help and now means that all Member Societies are contributing to all study groups.

DOD'S IN GOOD COMPANY

Recently our Governor Sir Philip Bennett, invited the general public to come and view the regal and historic Government House and gardens for the very first. Thousands flocked to see this beautiful home and its extensive gardens. Don and I went along to have a look at the gardens. They were a joy with lovely old trees, a lake, tennis courts, bowling green and, much to my delight, a small native garden. This isn't what I'd call a good native garden but it did have a hedge of Dodonaea viscosa ssp. spatulata planted as a background. One of our members (Tas. Region) has been in touch with the gardener and our Region has offered to assist to upgrade this section of the garden.

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S.A. Region, P.O. Box 304, UNley, S.A. 5061.

Tasmania Region, P.O. Box 1353p, Hobart, 7000.

Victoria Region, 10 Lloyds, Avenue, Carnegie, Vic, 3163.

Western Australian Wildflower Society, P.O. Box 64, Nedlands, W.A. 6009.

NEWSLETTERS ALSO SENT TO:

Australian National Botanic Gardens.

Bill Payne, Australian Plants.

ASGAP Study Group Co-ordinator.

National Library, Canberra.

State Library of Tasmania.

DODONAEA IN THE WILD

J.G. West

Australian National Herbarium, Division of Plant Industry, CSIRO,
P.O. Box 1600, Canberra, ACT 2601

Dodonaea is a predominantly Australian genus of 68 species in the family Sapindaceae. Fifty-nine species are endemic to Australia, another extends to New Guinea and the widespread *Dodonaea viscosa* extends from Australia to the tropics and temperate South America and Africa.

Dodonaea species are found in a vast range of habitat types in Australia; they are absent only from alpine areas and the dense heath and rain forest vegetation systems. The genus shows great diversification in Australia, both ecologically and geographically. In general those species having more primitive character states are more widespread and the taxa showing advanced characters exhibit restricted distribution patterns in the temperate south-west and south-east of Australia.

In this paper I want to give you an appreciation of the genus, from a taxonomic and scientific point of view as well as from the horticultural angle. Many species of *Dodonaea* have great horticultural potential, most of which is under explored. Through understanding some of the biology of the species and having knowledge of the natural environment in which they occur, we are better able to select suitable subjects for cultivation.

Some of the vast range of morphological variation in Australian species will be illustrated, and some morphological adaptations to particular environments will be considered. *Dodonaea* provides a good example of the varying significance of certain morphological characters in identification and classification.

In the past hobbushes have been described simply as dioecious, but the breeding systems operating in the genus are more complex than that. A model will be presented which involves the evolution of dioecy from more primitive sex forms within the genus.

Like several dioecious genera *Dodonaea* is wind pollinated. There are many morphological and ecological factors indicating this and the lack of dependence on a particular pollinating vector such as a bird or insect may be a significant reproductive strategy enabling species to succeed in various habitat types.

An analysis of morphological variation of the *Dodonaea viscosa* complex of species exemplifies some of the processes taxonomists use to determine the limits of taxa. It is this analytical work which often arrives at conclusions resulting in name changes that need to be understood by the botanical community.

DODONAEA STUDY GROUP

HARDINESS CHART

DODONAEA SPECIES	FROST	RABBITS	STRONG WINDS	ACID SOIL	ALKALINE SOIL	COASTAL CONDIT.	SANDY SOIL	FLOODING	POORLY DRAINED SOIL

I would appreciate some response from all members. Can any of your Dods tolerate any of these conditions, put a tick. Are they doing well despite these conditions, put another tick.

Members Name _____ Date _____