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Association of Societies for Growing Australian Plants

DODONAEA STUDY GROUP

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Leader: Jeanette Closs,  
7 Wyella Court,  
Austins Ferry, 7011.

Dear Members,

On July 25th most of Tasmania and our garden in particular received the heaviest snow in 65 years. It was a day of excitement and delight at the incredible beauty of everything covered in about 12cm of snow. I couldn't get to work because we have a very steep drive and road, but I took lots of lovely photographs. One was a closeup of a branch of D. sinuolata ssp. sinuolata bedecked with snow and another was a pot of Pterostylis curta x nutans with its flower heads heavily laden with snow. The slender stems didn't even bend with this unexpected weight.

I've mounted a few more specimens for our display kit and set up a snap album. I will be presenting the display at the 'Flowers of Australia' Exhibition in Hobart on October 18th and 19th. I do hope that some of my Dods will be in fruit by then. I've completed a master sheet for each Dodonaea species and subspecies. On these I will record any further information that you, the members of this study group send to me. I'd like to know what conditions your most healthy and vigorous plants are thriving in? What soils they grow in naturally? What species appear to have both male and female flowers on the one plant? What ratio there are of male and female flowers? In fact, any information that you can supply about their growing conditions and growth habits.

Volume 25 of the 'Flora of Australia' is now available at Commonwealth Government book shops. Included in this volume is the Sapindaceae family, of which the genus Dodonaea is a member. Judy West is the author of the Dodonaea section and we congratulate Judy on another excellent achievement. This volume is a must for Dodonaea lovers and has an excellent key to the genus and a number of good colour photographs.

NEW MEMBERS - a warm welcome is extended to:-

John and Cathy Etheridge, Plant Earth Wholesale Growers,  
5435 E. Herndon, Clovis, CA 93612 U.S.A.  
Geelong Group, SGAP, P.O. Box 387, Belmont, Victoria. 3216.

NEWS FROM MEMBERS - there really is very little - what is happening to our Dod lovers, your news makes our newsletter worthwhile.

Ida Jackson is trying some Dod. seeds again, she didn't have much luck with the last lot and she's keen to grow D. loculata in particular. I think it's worthwhile trying the boiling water treatment, although Marion Simmons tells me that she has no trouble getting Dods. up and she doesn't pre-treat them. Ida also sent me cuttings of an endemic from Kangaroo Island - Grevillea muricata and a Frankenia that does well in her garden.

Malcolm Hunt writes that his new address is 34 Hampden Street, Dubbo, 2830. Malcolm runs a nursery for the Forestry Commission and requested cuttings of some of my female Dodonaeas. We look forward to hearing of his success rate. We'd also like to know if you moved any Dods. from Wellington and if so, how they reacted, Malcolm?

Irene Elbourne wrote asking for some back copies of our Study Group newsletters. She notes that she knows little about Dodonaeas but is willing to learn. I'd like to know if the Study Group is providing the assistance that you need, Irene?

Doris Gunn sent me a nice newsy letter. She has a very healthy plant of D. multijuga, which she has been told is lime tolerant. Can anyone confirm or deny this. She also has a plant of D. humifusa which flowered last year and is now spreading well. She and her husband Bill, recently moved to a new home at Ocean Grove, Victoria and they are establishing a new garden as a retirement project.

2.

They have had great success growing a local shrub, Atriplex cinerea as a pioneer shrub and as protection from salt laden winds. Doris has seed of D. viscosa ssp. cuneata and D. boroniifolia, which she was planning to plant in May. I mostly put seed in, in September or October, what have other members found to be a good time. I've sent seed of D. humilis and D. hexandra to Doris to try.

Helen Bizzadi reports that she has not been successful with D. multijuga. She has had three plants grown (I believe) from Mindethana seed, and planted in different parts of the garden. She thinks that the hot summers in Elizabeth North, S.A. are not to their liking. It's natural habitat is the central coast and tablelands of N.S.W. and Queensland, so it would be accustomed to a higher rainfall than at Elizabeth. Doris's coastal situation obviously suits this species better. I have had only a poor rate of success with this species.

Seed was sown (from Mindethana) in:

Sept 79 - 3 were potted in Feb '80, planted out then died in Dec '81.

Aug 82 - some were potted and planted out in Jan 83 - two survive but very slow

Oct 84 - treated boiled water) potted Jan 85 and planted out in July '86.

Has any other member tried this species.

I have written to Greg Keighery, a botanist from W.A. who has recently moved to the Albany area, asking if he would help collect specimens for our herbarium, of species which aren't in our collection. I also made a similar request of the Australian National Botanic Gardens.

#### DODONAEE by L.A. STEPHENSON

(this article was published in the South Australian SGAP Journal in November 1979.)

It was Carl von Linne who named the genus Dodonaea in honour of Rembert Dodoens, who lived in the period 1517 to 1585. English records yielded very little information on Dodoens, but significant information was recorded in early French literature, and I am obliged to a colleague of mine, Mr. Russell K. Dann, who kindly translated the French text for me, to form the basis of this article.

Rembert Dodoens was born at Malines, near Antwerp, on 29th June, 1517, and it was in the troubled 16th century that he made his mark on science. You may recall that the 16th century was the time of Henry VIII, Henry VIII, Edward VI, Elizabeth I, Sir Walter Raleigh, Sir Francis Drake, William Shakespeare, Louis XI in France, Ivan III in Russia and Phillip in Spain. All European countries were astir with major changes in the social and religious order, as the full impact of the Renaissance, which began in Italy towards the end of the 15th century spread across Europe.

Details of Dodoens' early childhood are not recorded, but we do know that at an early age, he was sent to Louvain University to study medicine. His progress in science was rapid, and before he turned 19 years of age, he graduated as Licentiate in 1535.

He briefly attended universities in France, Germany and Italy, but no great details are available. In those days, no synthetic drugs were available, there were no anaesthetics, surgery was rudimentary and the physician made extensive use of herbs and essences of vegetable material. A doctor, therefore, was required to be proficient in botany.

He seems to have worked as physician in various parts of Europe and in 1546, his first book was published in Basle. He went back to Malines for a short period and then on to Italy, from whence he came to Germany in 1570 to become physician to Emperor Maximilian II, after the emperor's former physician, Nicholas Biesus, had died. He remained the emperor's physician until 1576 when the emperor died, and he stayed on to serve Rudolf II, Maximilian's son, in the same position.

In his position of influence, it is not surprising that he made enemies, and his position at court became very difficult. To add to his troubles, revolts and uprisings occurred throughout the Low Countries, and some of his properties near Malines and Antwerp were threatened. He obtained leave from Emperor Rudolf



with a view to travelling to Malines, but by that time, civil war had broken out. He therefore broke his journey at Cologne where, in the course of his practice as a physician, he became renowned for several remarkable and unusual cures.

By March 1580, the troubles in the Low Countries had become resolved and he travelled to Antwerp to attend to his properties. The authorities at Leyden University offered him the chair in medicine and thus, Dodoens became Professor of Medicine, a post he held until his death on 18th March, 1585.

Dodoens was regarded as a very capable physician. He had studied languages and was very fluent in several languages. He had quite profound knowledge of mathematics, and by the standards of his day, he was also an authority on botany.

He has been regarded in Europe as one of the men of the 16th century who contributed the most to the understanding of botany. It is, in fact, to botany that he dedicated the most important of his written works.

He wrote and had published no less than 17 books in all, some exclusively on botany and some partly medical and partly botanical. These books became known as Herbals, since the science of botany was not then so well organised as it was later.

He appears to have been capable of producing books with great regularity. His books appeared in 1546, 1548, 1552, 1553 (2), 1554, 1565, 1568, 1574 (2), 1580, 1581 (3) and 1583. Two further books, which he largely wrote, were not published until 1598 and 1616 respectively - after his death. His books were sometimes written in Latin, sometimes in French and some were in Flemish.

It was in 1552, after he had written two books, that Dodoens really tried himself out as a botanical writer, and the book was a success. A publisher named Loe, purchased a collection of plates done by Fuchs, who will be referred to briefly, presently. These plates illustrated most of the then known wheats and other cereal plants. Loe asked Dodoens to write the text explaining the plates, and the book that resulted, probably one of the earliest devoted to cereals, was an effective treatise. Other treatises followed in which Dodoens prepared himself for his main work, 'History of Plants', which was published in 1553.

'History of Plants' is rather a compilation than an original work. Dodoens, with notable scholarship, established which were the plants known and used in ancient times. He also noted, with great exactitude, the medical virtues of the plants he describes. He was less successful in his attempts to classify them in systematic order. His classification was based on the customary use of plants and it mainly referred to the parts of the plants described. For instance medicinally, seeds were used from some plants while leaves or petals were used from others. Those plants, for which Dodoens would ascribe no particular use, were merely arranged alphabetically.

One of the amazing aspects of Dodoens' life was the way he travelled extensively in the days when few ventured far from their place of birth. Dodoens was innovative in corresponding freely with other workers and in using information supplied by others. For instance, he used plates prepared by both Charles de L'Ecluse and Mathias de Lobel in his own books, and they used some of his plates in their books. This friendly exchange was a great service to botany.

The book he wrote in 1583, 'Stirpium Historia....' contained 1341 woodcuts. He described plants from Egypt and India from information supplied by L'Ecluse, and plants from Italy from details supplied by both Prosper Albin and Fabia Colonna all of whom held Dodoens in high regard.

Carl von Linne lived in the period 1707-1778, and it was mainly Linne's work that put systematic botany on a sound footing. Nevertheless, earlier workers contributed with knowledge and observation, and the promotion of various systems of classification that made Linne's work possible. The principle workers in the 16th century were Brunfels (1464-1534), Fuchs (1501-1566), Dodoens (1517-1585) and Clusius (1526-1609). Of these workers, Dodoens clearly contributed the most. It was, then, for very good reason that Carl von Linne recognised the work of Dodoens in naming the Australian genus, Dodonaea, in his honour.

FINANCE

At last we have a small balance. We are grateful for donations received from: Maroondah Group of Victoria Region  
Western Australia Wildflower Society  
Ida Jackson  
Pine Rivers Group of the Queensland Region.

A cross in the box will indicate that your subscription of \$3 was due in June 1986

Brought forward	\$4.88	Postage	\$17.65
Subscriptions	54.22	Stationery	9.64
Donations	<u>8.00</u>		
	67.10		<u>27.29</u>

Balance \$39.81

LIME TOLERANCE

In the notes on ecology in the *Dodonaea* revision, Judy mentions that the following species are sometimes found on limestone or sand overlying limestone. This may be a helpful guide to members living in such areas.

<i>D. aptera</i>	<i>D. larreoides</i>
<i>D. ceratocarpa</i>	<i>D. polyzyga</i>
<i>D. hackettiana</i>	<i>D. stenophylla</i>
<i>D. humilis</i>	<i>D. stenozyga</i>

*D. caespitosa* is a salt tolerant species.

ARTICLES FOR AUSTRALIAN PLANTS

I have had a very poor response to my appeal for articles for the Australian Plants Journal and to be honest, I haven't written one myself yet. I have been holding Barb Bayley's drawings and descriptions of some of the South Australian *Dodonaea*s for Australian Plants, but I think it's best that our members enjoy Barb's work. I am including the second sheet that she sent me some time ago.

Spring is approaching and it is a time of much activity in the garden. There is plenty of seed in the seed bank, so don't hesitate to ask for it if you can use it. Another thing you might like to do is to record the time of flowering and fruiting of the Dods in your garden.

Best wishes,

Jeanette Closs



Dodonaea microzyga

Dwarf to small shrub, spreading; branches many rigid; branchlets terete or slightly angular, dark red-brown, viscous, glandular, glabrous or slightly hairy; leaves pinnate, 0.4-1.2cm. long, with terminal leaflets; leaflets 3-11, to 0.8cm, x 0.3cm, oblanceolate to obovate, viscous, with prominent glands, apex obtuse or rounded; flowers male and female on separate plants, 1-2 per axil, profuse; capsules 3-4 winged, 1-1.4cm, x 1-1.8cm, glabrous or slightly hairy, viscous, red to red-dish brown or purple, mature Aug. - Dec.

Beltana (Flinders Ranges) to Far North; westward to Musgraves Ranges and Ooldea.



Dodonaea viscosa ssp. spatulata

Erect to spreading shrub, 1.5-4m high, branchlets glabrous to puberulent; leaves sessile or petiolate; lamina usually obovate, sometimes spatulate, rarely elliptic, 2.3-7.5 x 0.6-1.6cm, coriaceous, viscous, base narrow-attenuate, margin entire to irregularly sinulate or irregularly denticulate, apex sometimes obtuse or rounded with a very short abrupt point. Capsule 3-4 winged, broad-elliptic to transverse-elliptic in lateral view. Red at maturity.

Found Northern Flinders Ranges, Southern Lofty, Eyre Pen, South Port Lincoln.

Dodonaea lobulata

Small to medium shrub; branches many, slender, spreading; branchlets angled to slightly ribbed, viscous, glabrous or slightly hairy; leaves 1.5-5.5cm x up to 0.5cm, simple, narrow, flat to concave above, margins with prominent, small rounded lobes, shiny, often viscous flowers male and female on separate plants, 2-3 in axillary clusters; capsules 3-4 winged, 1-1.5cm x 1.4-2.1 cm, pendulous, on prominent stalks, glabrous, pink to red-brown, mature July - Feb. Tickera scrub northward to Flinders Range; Murray scrub and north thereof.

