

ASGAP BRACHYCHITON & ALLIED GENERA STUDY GROUP

ISSN 0816-178x

Newsletter No. 21

March 2003

Leader : Kerry Rathie, lot 5, Salston Road, Greenbank 4124.

phone : (07) 3200 0268

Email : krathie@powerup.com.au

Mea culpa : No good excuses for such a late newsletter, just a cluttered year with a series of minor happenings which chewed up a lot of time. Also on October the 1st Qld. SGAP lost its secretary with the untimely death of study group member Ian Waldron, at 53. As Ian was also chairman of our local group, & its newsletter editor, & my wife Annabel was vice-chairman, she became acting chairman & I got the editor job, & a couple of others. I never fully realised how many tasks Ian was doing. At least he lived to see our local branch's field guide book, 'Mangroves to Mountains', finally get published in April 2002. This had also taken a lot of time for all seven co-authors, but most for Ian. He is much missed.

Weather & plant behaviour : Peculiar once again, with a mild early winter, then 21 frosts, some severe, between late June & mid August. Much of coastal N.S.W. & coastal southern Qld. had a series of the most severe frosts on record, & a lot of people I knew who thought they lived in frost-free areas woke to find bush-houses full of black plants, even many who lived right on the ocean.

September was warm, in the 30's (all temperatures are in degrees Celsius), & late October & early November had 14 very hot days of 39 to 42, then cooler (in the 20's), then 5 hot days in early December, then normal (30 to 35) till mid-January 2003, then 8 days over 36, a few cool in early February, then back to over 36 in mid & late February. March has been normal, 28 to low thirties.

All forms of *B. bidwillii* started to flower in early October, as did *B. Clarabelle*, *B. excellens* (Rosalind & newly-named clones K5, K6, K7 & K16), *B. spectabilis* & *bidwillii* x *bidwillii* 'Large Pink' (first 2 or 3 flowers from this hybrid). By mid-November *B. bid.* 'Clayton' had finished flowering, & *B. bid.* 'Maroochydore' had only a few sporadic flowers. *B. vinicolor* 'Clarabelle' produced roughly equal numbers of male & female flowers for the first 3 weeks, & then only male flowers, as did *B. 'Clayton'*. The Leichhardt forms (LF) of *B. bidwillii* (which included 'Large Red', 'Large Pink' & 'White Star' (= K 12)), had only male flowers until 28-11-02, & then produced about 15 % of female flowers. 'Rosalind', *B. viscidulus* & *B. vitifolius* all flowered well, but had only male flowers. *B. megaphyllus* had only a few flowers, all male. By early January, 'Rosalind', *B. spectabilis* (with a roughly equal sex ratio in its flowers), *B. acerifolius*, *B. viscidulus* & *B. megaphyllus* had finished flowering. By mid-January, 'Clarabelle' & *B. vitifolius* had finished, while most *B. bidwillii* LF & *B. bid.* (local form, as at Canungra & Mt. Tamborine) flowered up until Mid-February.

Articles : The Sept. 2002 (Vol. 21, No. 172) issue of 'Australian Plants' contained a four page (pp. 347-350) article by myself on *B. bidwillii* & some of its hybrids. Two of the pages contained photographs only. On p. 348 the top photo is of 'Clayton', & the bottom one is of *B. excellens* 'K5', showing it inherited the yellowish immature pod colour of *B. discolor*.

Membership matters : Welcome to new member Christine Wadey, of North Eltham, Vic.3095. She probably thinks I had forgotten about her.

Red peduncles : In newsletter no. 20 I mentioned finding four pods on a *B. bidwillii* LF with the half of the pod stalk (which I shall call the peduncle until I find a better word ; peduncle more correctly applies to the stalk of the entire inflorescence) nearest the pod a bright pink. I then thought that I had probably used 'Clarabelle' on those flowers. This last summer four plants of *B. bid.* LF showed the same pink peduncle trait, but only on flowers pollinated to 'Rosalind'. All four were 'Large Pink', while the pod parent the year before was 'Large Red'. As before, the colour fades to brown as the pod ripens. I have sown seed of all these pods, & of 'Clarabelle' x itself & 'Clarabelle' x *bidwillii* LF, so should soon know whether I did use 'Clarabelle' on that plant of 'Large Red', as the juvenile leaves should be different. Leaves of *B. excellens* x itself look just like the parent, so far. No *bidwillii* plants pollinated with 'Clarabelle', *vitifolius* or any form of *bidwillii* showed red peduncles.

Pod Sizes : Pods from *B. vitifolius* pollen are only half the size of those sired by *bid.* LF or *bid.* Maroochydore or 'Clarabelle' or 'Rosalind' (see table). Those with 'White Star' as female parent were also small. No *B. vitifolius*, *viscidulus* or *megaphyllus* plants set any pods, but they had few or no

female flowers. Plants of *bidwillii* that are small in stature seem to have smaller pods with fewer seeds, & seeds of smaller size.

POD SIZES

Parents, female first	No. of pods	Average pod length, in cm.
'Large Pink' x <i>vitifolius</i>	8	6
'Clayton' x Maroochy	4	13-14
'Clayton' x itself	8	11-12
'Clarabelle' x itself	31	13
'Clarabelle' x 'Rosalind'	38	13.5
bid. LF x 'Clarabelle' or 'Rosalind'	27	10
'Rosalind' x itself (not at my place)	6	14
bid. 'White Star' x 'Rosalind'	2	6
bid. 'K15' (a LF) x (<i>spectabilis</i> x LF)	4	7.5-8
Bid. Maroochydore x itself	8	10-15

Miscellaneous notes : One of my one-time student colleagues (Agricultural Science at Univ. of Sydney, a frighteningly long time ago), Graham Young, dropped in recently. He has worked in the N.T. (was once President of TENPS, the Darwin equivalent of SGAP), Papua-New Guinea & the Kimberleys. He tells me that the stand of *B. spectabilis* 3.1 km from Victoria river township, & which I failed to find (having no exact location), is mainly red-flowered. The ones from Jasper Gorge, which mine & Merv's are derived from, are apricot-pink, similar to *megaphyllum*, aff. *megaphyllum*, *vitifolius* & *chillagoensis*. Here in Brisbane, *B. viscidulus* has a trickle of flowers spread over 4 months. In the Kimberleys, it flowers profusely over 3 months.

Frost casualties : Over winter I had 23 frosts, down to -6 degrees. I had placed all the more tropical species & hybrids, like *grandiflorus*, *viscidulus*, *megaphyllum* & *spectabilis*, under the shelter of trees which kept all actual frost off them, & all were fine. About 60 m down the slope, just below my main dam, I had planted 25 trees, 15 of which had been in large pots for several years, & all of which had been grafted on to *acerifolius* (flame tree) rootstocks. Plants which died, apparently because the rootstock was fatally frosted, included 'Clarabelle', 'Belladonna', 'Butt's Red', *collinus*, various clones of *bidwillii* & sp. Exmoor Station (I lost this species entirely, but have recently regained it via grafts from two trees the army had at their *Brachychiton* arboretum near Canungra, courtesy of member Don Lynch, their Land Manager)(Grafts from my original tree). Unaffected plants included juvenile (about 6 years old) & adult *B. sp. Ormeau*, both subspecies of *B. diversifolius* (most juvenile), *B. populneus*, *excellens*, *acerifolius* x *bidwillii*, & a presumed *acerifolius* x *rupestris*.

One of the study group members, John Warnford, lives in Sydney but has a fine -wool sheep property near Mudgee. Frosts there were horrendous (by Australian standards, you North Americans) this winter, with several around the -12 mark. Thriving 3-year-old grafted plants of 'Clarabelle', 'Belladonna' & *bidwillii* all succumbed, as did juvenile ungrafted seedlings of *B. populneus* of a similar age. These last would be unmarked by ordinary frost levels. Wrapping trunks in hessian, old newspapers etc. might have saved them, but spraying leaves with anti-transpirants like 'Envy' would I am sure have been useless, although it can help in the case of mild frosts.