It is up to us

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Research by the Camellia Memorial Trust’s doctoral student at Massey University has identified *Camellia* species that have strong to moderate resistance to petal blight. Dan Charvet’s article for the American Camellia Society Yearbook confirms that, from his 20 years of experience in breeding hybrids incorporating these species, some will inherit the blight resistance. This seems to be a simple result of the Mendelian laws of inheritance.

So the next step, as encapsulated in the short, sharp words of my heading, is surely that all members who have suitable plants should now join in a campaign to breed more and more of these hybrids until a full range of resistant cultivars is generally available. Pollinating is not all that time-consuming; fifteen minutes on a fine day, when flowers are open and the pollen is dry, will get a number of crosses made.

The bonus, if many members will commit to this campaign, should be a general lifting of our spirits after the disappointment of seeing so many of our flowers disfigured by the disease, and gloom replaced by a sense of joint effort entirely appropriate to a specialist plant society faced with such a major problem. We can produce blight resistant cultivars if we are willing to do the work.

Matthew Denton-Giles, the Trust’s present scholarship student, recently spent a month shuttling between Dan Charvet’s nursery and Davis University in San Francisco. From this work and his New Zealand studies he now regards *C. lutchuensis* as the most resistant species yet tested and available to us. An extra dimension to hybridising from this species is that the very desirable characteristic of scent will also be carried forward into at least a percentage of hybrids. Other small leaf species with blight resistance also have scent: it is not yet established whether there is a direct correlation between blight resistance and the ability to produce scent, or if it is just a piece of good fortune to be thankful for.

As Charvet points out, using a resistant species, which nearly all happen to have small flowers in great quantity, as one of the parents in a cross does not limit the size of the offspring. Climate conditions in Dan’s area have resulted in him using mainly reticulatas as the other parent, because he gets a better seed set. Dan has now named about twenty larger flowered hybrids, and has more under trial. He advises that in making the pollinations he uses either the smaller or larger flower to be the seed parent, according to the availability of flowers and pollen. He does not think that this affects the size of the resulting seedling flowers.

We will also be able to use larger japonicas to obtain a wider range of colours and flower forms. A promising seedling of mine from the *C. fraterna* hybrid ‘Yoimachi’ is 7cm in diameter. Perhaps even more surprising, an anemone form seedling of the tiny flowered *C. minutiflora* is 7cm in diameter.

There is more heartening news in that both of these seedlings are flowering in May, along with several other *lutchuensis, transnokoensis* and *fraterna* seedlings. This confirms another of Charvet’s points, that use of the small flowered species tends to bring the flowering season forward, allowing good displays before the blight becomes widespread. And two final positives for joining in this work are that firstly, such seedlings almost always flower younger than say japonicas or reticulatas, often at 2-3 years old. Secondly, virtually all seedlings obtained will have the mass flowering and self-grooming habits of the small leaf species, and be attractive garden plants even though only the very best may be named.

So, on to suggestions for crosses to make, using our knowledge gained to date. I am listing below the most resistant species available, along with hybrids from them, which can be used as seed
setters or pollinators. I must stress that not all of the hybrids listed will be seed setters or produce useable pollen. I do not have sufficient information on this.


Comment: a number of these are definitely not seed setters but may provide pollen, eg ‘High Fragrance’. ‘Pat Pinkerton’ would be a great chance to jump ahead a generation, being half reticulata. If anyone could supply me with a few scions I would be very grateful.


Comment: all seedlings of this species seem to be excellent, dark leafed plants. Crossing with retic hybrids or japonicas such as ‘Bob Hope’ and ‘Royal Velvet’ must produce good seedlings.

*Yuhsienensis*: ‘Fragrant Burgundy’, ‘Good Fragrance’

Comment: these two Finlay hybrids appear to be the only ones available to us, but the species is well worthwhile using. It has extra features of very strong scent, and reflexed leaves that give the plant an intriguing and attractive appearance.

*Yunnanensis*: no hybrids available

Comment: highly regarded by Dan Charvet, Christine Taylor observed during her Massey studies that she could only infect yunnanensis via the stamens. Does this mean that if you can produce formal doubles or full peony flowers that they will be highly resistant?


Comment: I suspect that only a limited number of these may be seed setters, but two I highly recommend are ‘Yoimachi’ and my seedling from it, ‘Silver Column’. Their seed setting ability may trace back to the ‘Yoimachi’ parent ‘Narumigata’, noted for its ability to cross with many other species. ‘Yoimachi’ is also generous with its pollen. The plus feature of ‘Silver Column’ is the very slender, upright growth for which it is named, and which a proportion of its seedlings will inherit.

*Cuspidata* ‘Candle Glow’, ‘Cornish Snow’ (reported resistant), ‘Wirlinga Bride’.

Comment: all three are worth working with, ‘Wirlinga Bride’ being of particular interest as having *cuspidata, fraterna* and *tsaii* in its make up, plus a very distinctive plant appearance. It set a couple of open pollinated seed for me last year, and will surely do better this year when I pollinate.

The campaign is off to a good start already, with David Muir, Project Manager of the Whangarei Quarry Gardens promising co-operation. The importance of this is that these gardens hold over thirty of Jim Finlay’s *lutchuensis* and *yuhsienensis* hybrids, including some unregistered seedlings. Discussion will be taking place between David, Whangarei Branch members and myself to find the best ways of using this resource. It will be a great extension of Jim’s work in producing scented camellias, and shows again the value of preserving collections of important camellias in public gardens.