

Some Observations on the Breeding of Japanese Camellias

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In my garden, there grows a 20-year-old camellia with beautiful white flowers which I have named 'Kusano-Shiro'. This plant produces a lot of seed every year, and I have produced many young plants from it. I wish to report my observations on the segregation of flower colour and form in F1 crosses.

Flower Colour Segregation. Nearly half of the plants have white flowers (13/24) and about 20% have double or peony form. These plants are hybridised with a nearby camellia, cultivar Hagoromo, which has a lotus flower form and pale pink colour. A further 20% of these seedlings are bicoloured, suggesting an out-cross with the variegated-flowered cultivar Shibori-Shiratama.

Leaf Colour of Young Plants. The colour of the new leaves of the young plants indicate the flower colour of the adult plant. So, I can easily forecast the flower colour and variegation at seedling stage.

Variation in Fruit Size. I plan to breed oil-producing camellia cultivars. Therefore, I have begun to measure the size and weight of the fruits. The average weight of a fruit is 34.2 g, and they range from 5.0 to 87.5 g. The average total weight of seeds per fruit is 9.1 g, and they range from 1.0 to 20.2 g. The average percentage of seed weight to fruit weight is 27.8%, and ranges from 6.7% to 53.8%.

My most important criteria for breeding seed-oil-producing camellia cultivars in the future will be the selection of clones with a high percentage of seed weight and large heavy fruit.