



## The Scottish Rock Garden Club

Forrest Medal at Aberdeen Show 2017

Cyril Lafong : *Trillium grandiflorum* 'Flore Pleno'

-report by Stan da Prato



Cyril's Forrest medal number 57 led to inevitable comments inspired by the old Heinz marketing slogan about whether he achieved this remarkable feat by growing 57 varieties of plants – not quite as some plants have achieved the top award on more than one occasion though not in the same season. One such is his well-known *Trillium rivale* 'Purple Heart' which regularly stars at earlier shows and which has won both Forrest and Farrer medals in its time.

For Aberdeen, which is the last show in the SRGC spring series, he brought a much bigger Trillium: ***T. grandiflorum* 'Flore Pleno'**. He acquired the plant back in 1993 as *Trillium grandiflorum plenum*. Sometimes it is also called 'Flore Plena' or simply 'double flowered white'. There is at least one named clone, 'Snowbunting' (*Trillium grandiflorum* f. *polymerum* 'Snowbunting') which has a different arrangement of the petals. There also seem to be several more named forms nowadays. This plant of Cyril's has been shown just once previously, about eight years ago when it got a first but not the top award. Cyril grows it in a large plastic pot (there is much to be said for relatively lightweight plastic pots for large plants!) - in a moist, acid compost that never dries out. It is outside on the patio and stays there all the year round. The Aberdeen plant was given overhead protection, under a canopy, about 10 days before the show.



Cyril and the winning plant

*Trillium grandiflorum* as a single or double is one of the most popular trilliums in cultivation because of the size and clear white colour of its flowers. However, as with all of the genus, its cultivation is a slow process and Cyril's plant is testimony to the care he has given it over so many years. Not surprisingly this species has gained the Royal Horticultural Society's Award of Garden Merit.



Show Secretary, Ian Chapman, local SRGC Group Convenor Mike Hopkins and Cyril Lafong.

In its native North America *T. grandiflorum* has been studied extensively by ecologists. It is an example of a plant whose seeds are spread through dispersal by ants, which is effective in increasing the plant's ability to outcross, but ineffective in bringing the plant very far. This has led ecologists to question how it and similar plants were able to survive during the ice ages.

Insect dispersal is aided by the presence of an oil-rich body attached to the seed, which is high in both lipids and oleic acid. The acid induces corpse-carrying behavior in ants, causing them to bring the seeds to their nesting sites as if they were food. As ants visit several colonies of the plant, they bring genetically variable seeds back to a single location, which after germination results in a new population with relatively high genetic diversity. White-tailed deer have also been shown to occasionally disperse the seeds. While ants only move seeds up to about 10 metres, deer can transport them over a kilometre. Occasional long distance dispersal by deer probably helped save this and other species from extinction during the ice ages. DNA analysis has shown that *T. grandiflorum* is likely to have persisted through the last glacial period in two refugia in the south-eastern United States and that long distance dispersal was responsible for the post-glacial recolonization of northern areas.

Burial by ants increases the survival of rate of new plants by ensuring sufficient depth to preserve the seeds through their dormancy (Trillium seeds are normally dormant for their first year) and by adequate anchorage of the rhizomes.

*Trillium grandiflorum*, as well as other trilliums, is a favoured food of white-tailed deer. Indeed, if trilliums are available deer will seek out these plants. In the course of normal browsing, deer consume larger individuals, leaving shorter ones behind. This information can be used to assess deer density and its effect on the habitat.

*T. grandiflorum* is the provincial emblem of Ontario and the state wild flower of Ohio.



*Trillium grandiflorum* 'Flore Pleno' at Cyril's home.