

2018 Summary of Accomplishments

New cultivars of nursery plants with novel ornamental traits and disease resistance

This update is provided to the OAN Research Committee and ODA to highlight areas of ongoing progress in research projects to breed new plants with disease resistance, greater ornamental interest, or better performance to support the Oregon Nursery Industry.

Cotoneasters. We released ‘OSUCOT1’ Emerald Sprite™ this year and have applied for a US Plant Patent. This cultivar is fire blight resistant, compact, and extremely fast in production. It has been licensed by Iseli and I hope many others pick it up as well. It is being trialed by numerous nurseries. We encourage this cultivar to be communicated to the industry that it is available for **ALL Oregon growers**. License structure and royalties available on request. Continued disease, landscape, and production trials were conducted on other selections. Several are promising for the future.

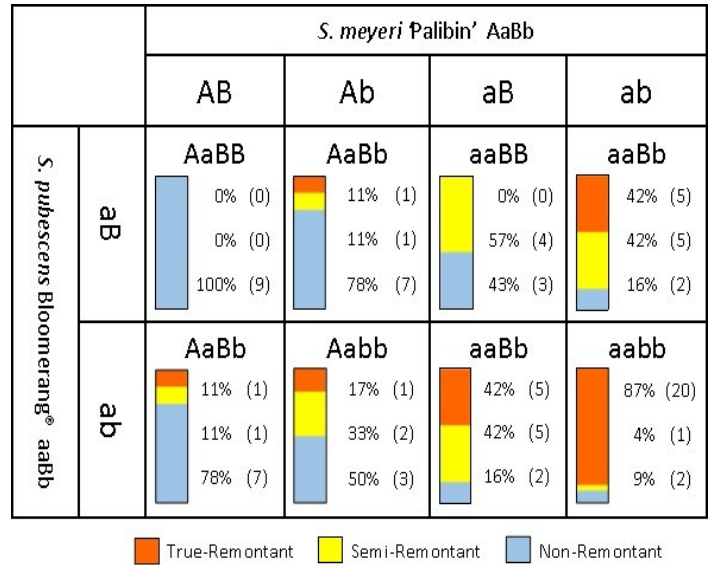


Fig. 1. ‘OSUCOT1’ Emerald Sprite™ in the Contreras landscape and in container production.



Fig. 2. Likely the next cotoneaster release. Fire blight resistant, replacement for ‘Coral Beauty’. These are two year old plants that have only been pruned twice.

Lilacs. We have a linkage map for lilacs – I know that is not exciting for growers but it is part of our evolving toolkit to expedite breeding for improved lilacs. We have also identified that the control of reblooming in dwarf lilacs is a two-gene model (Fig. 3 – *at the right*). We are getting close to a usable marker(s) that can be used to screen for plants with the gene(s) for reblooming. This will make us much more efficient. For instance, only 30% of plants from the cross of Palibin x Bloomerang are full rebloomers. That means we grew 70% of plants only to throw them away. We could grow much larger seedling populations, screen them with our marker, and discard plants without our marker of interest. This step made this year is very exciting.



Philadelphus. We have reduced the number of selections to 6 and propagated those in 2018. I thought we would have distributed those but did not. I have more confidence in these selections after yet another year of field evaluation. Based on comparison with nearby industry clones, I believe we have better plants for the industry.

Sarcococca confusa. We have reduced the truly viable clones to four and we have numbers of each that are able to be distributed. Propagation numbers are confirmed and will then use those to confirm production scheduling.

Galtonia candicans. We have narrowed down selection of these to two that are highly floriferous, do not lodge, and are seedless. We will divide them this fall and distribute. We have been in touch with interested companies.

Ribes sanguineum. We have made additional crosses between ‘Oregon Snowflake’ and other dwarf progeny developed in 2016 and 2017. Seedlings will be grown and evaluated next year. This program is winding down due to relative lack of interest. I think your money can be better spent on other crops. We will likely not make further crosses in 2019 or beyond.

Styrax japonicus. There are no new updates from 2018 other than we field planted our hybrids between Evening Light x Marley’s Pink Parasol and Fragrant Fountains, respectively. There

also were several clones received from Carlton Plants that were evaluated and identified as superior. All were field planted and will be observed.

Cercidiphyllum japonicum. Plants remain growing on well, but no hybrids have flowered. We continue observations and pushing growth as much as possible. It is unclear when they will flower.