“Jewel in the Genome” is a phrase used in RosBREED to identify valuable rosaceous genetic discoveries that have been put into breeding application. In this final article, the placement of these jewels is illustrated on the crop chromosomes collectively illustrating the growing genetic “necklace”. Knowledge of these jewels and their locations relative to each other is being used to increase the efficiency of rosaceous crop breeding. Putting these genetic discoveries into application has been one of the hallmark outcomes of RosBREED.
Jewels in the genome: The Necklace, cont.

Apple — 17 apple chromosomes

1. Vf - scab resistance; Md-Exp7 - fruit firmness
2. BI - “Blush” fruit skin pattern
3. A - fruit acidity
4. Rf - red skin overcolor
5. PG - fruit firmness
6. ACO - fruit texture & storability
7. Bp 13 - bitter pit
8. ACS - fruit texture & storability
9. Ma - acidity, crispness & juiciness; Bp 16 - bitter pit

Strawberry — 2 of the 7 chromosomes

IV
V

1. FaPFRU - Perpetual flowering and runnering
2. TaV-M.2 - Fruit acidity

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