

‘Jumping’ genes responsible for strawberry sexes show how fast plants evolve

[S]eparate sexes may seem fundamental to nature, but they’re an oddity for most plants. Now, scientists have figured out how strawberries made their recent transition to male and female. The unusual “jumping” genes responsible could mean sex differences can change faster in plants than anyone realized.

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Animals have ancient sex chromosomes with a common origin. But in plants, sex chromosomes have arisen only in the last few million years, and most plants are generally hermaphrodites

Strawberries, [as one uneducated Ohio farmer discovered in the 1840s](#), come in three flavors: male, female, and combo.

[E]cologist Tia-Lynn Ashman at the University of Pittsburgh has spent nearly 20 years showing that different locations on the strawberry genome can control sex Unlike humans strawberries have a whopping eight copies of seven chromosomes, for a grand total of 56.

Ashman’s first stroke of luck came when she and her team found the first evidence of [male- and female-determining regions](#) in an East Coast variety of a common North American wild strawberry

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[The researchers] sequenced 60 *F. virginiana* and *F. chiloensis* plants to see whether any DNA was unique to the females. They asked what genetic sequence was present in all females, but absent in all males. Sure enough, all females [shared a short sequence](#) that had jumped at least twice as the plants reproduced over many generations.

Read full, original article: [The secret sex life of strawberries](#)