

Divided by sexes

The Jojoba shrub grows in deserts and has separate male and female plants

Jojoba oil is extracted from seeds of female flowers for pharmaceutical/cosmetic products



♂
(male)



♀
(female)

But **female** seedlings fare worse than male seedlings under drought conditions



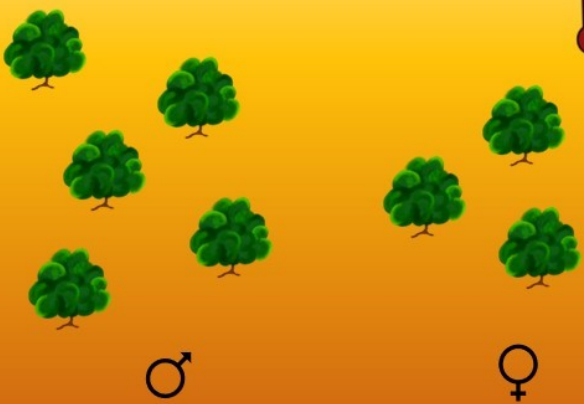
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This causes **imbalance** in the number of female plants leading to less oil production



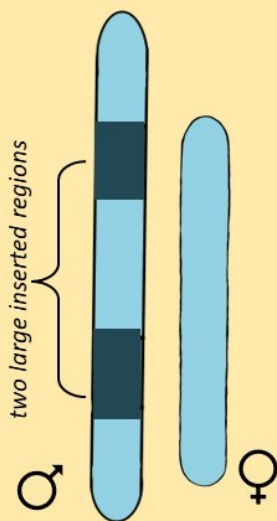
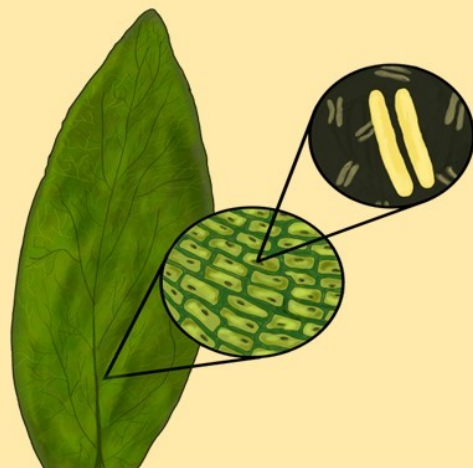
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Why do males survive better than females?

Al-Dossary and colleagues looked at the genetic information of both male and female plants

Genetic information is encoded in **genes** which are found in **chromosomes** of cells



The male and female plants have **sex-specific chromosomes**

They found that the male sex chromosome is **longer** with two large regions that are absent in the female sex chromosome

Researchers hope to understand whether these **extra genes** in the male sex chromosome play a role in **drought tolerance**

