

The alchemist honey bee: Uncovering the floral resources that create liquid gold



GROW
NEXT GEN

The honey-making process

Nectar + vomit + invertase + wing power



youtube.com/watch?v=nZ1EjDLJCmg

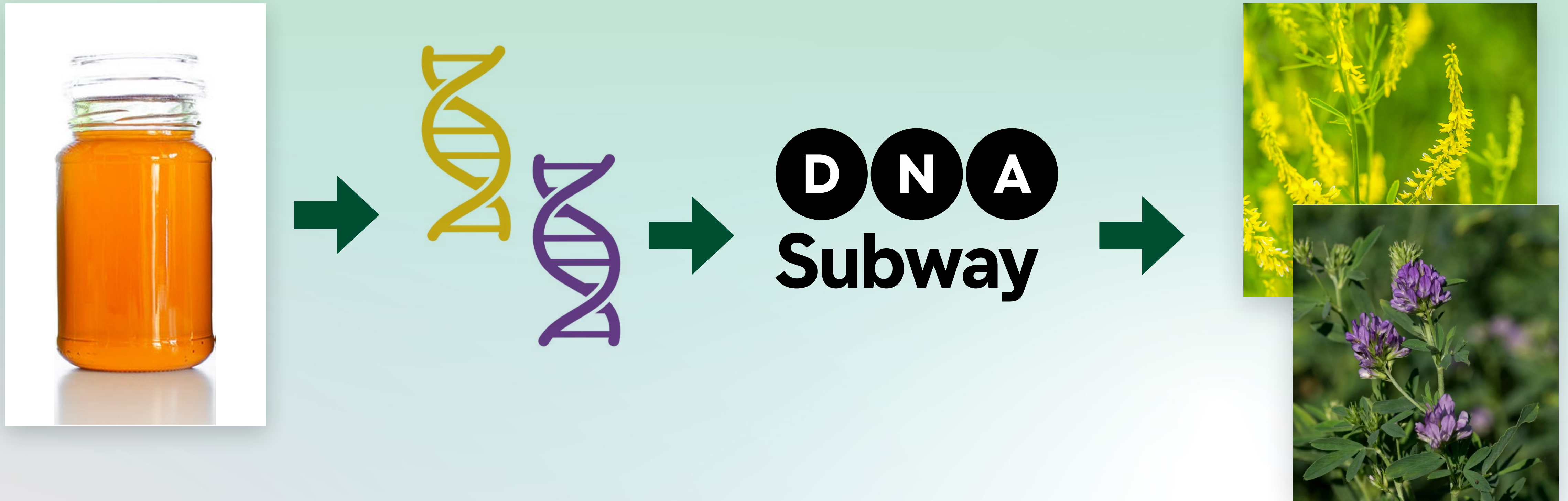


**Honey bees can travel
about six miles searching
for blooming plants!**

DNA of the nectar source is found in honey



DNA sequencing analysis helps identify floral resources of honey bees



Goals

- Demonstrate the broad applicability of DNA analysis
- Identify floral resources of bee colonies through a bioinformatics platform: DNA Subway
- Discuss how the results may help the researcher and beekeeper

Scenarios



Commercial beekeeper: Marty McFly, marketing manager at Awesome Bee Honey Farms



Wildlife biologist: Dr. Ellie Sattler, conservation biologist at the Ohio State University

Getting started

- DNA Subway website: dnasubway.cyverse.org
- Honey sequences: grownextgen.org/go/honey