Sweet success: how bees choose which pollen to collect

Plants have a complicated relationship with bees: They need the insects to spread their pollen, but—because pollen takes a lot of energy to make—flowers need to make sure each bee doesn’t take too much. Now, new research has shed light on how plants control how much pollen each bee extracts from them—taste, according to a study published today in the journal *Biology Letters*. Researchers presented six *Bombus impatiens* colonies (pictured) with pollen laced with sweet sucrose, bitter quinine, or neutral cellulose. During the 5-minute trials, they observed that the bumblebees spent nearly three times as much time collecting the sucrose-laced pollen than the quinine-laced pollen, and nearly 50% less time harvesting the cellulose-laced pollen than the sucrose-laced pollen. Although the bees ended up collecting roughly the same amounts of sugary and cellulose pollen, they appeared to go after the sucrose-laced pollen first, showing that they preferred the taste of this pollen. Researchers hope that further studies will show whether and how plants in the real world use taste to control how often pollinators visit them.