Pollinators:

Types of Plants Pollinated

Plants attract animal pollinators

- Similar to advertising at a supermarket!
- Colors and shapes advertise nectar and pollen

Plants and their animal Pollinators

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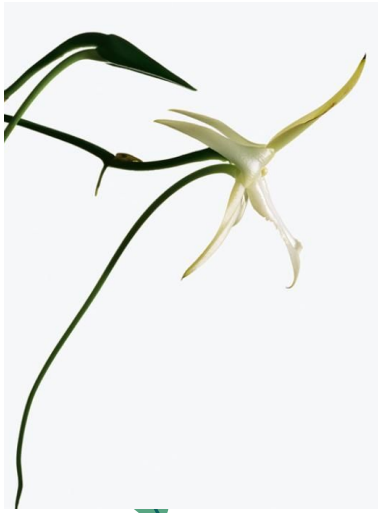
- Plants can also have adaptations to help animals to pollinate them
- When plants and their specific pollinators evolve together, this is called coevolution!

Coevolution example!

- An orchid evolved to have nectar at the bottom of a very long tube
- A moth evolved a very long proboscis (tongue) to reach this nectar



How do plants attract specific pollinators?

What do you like about flowers?

Bees

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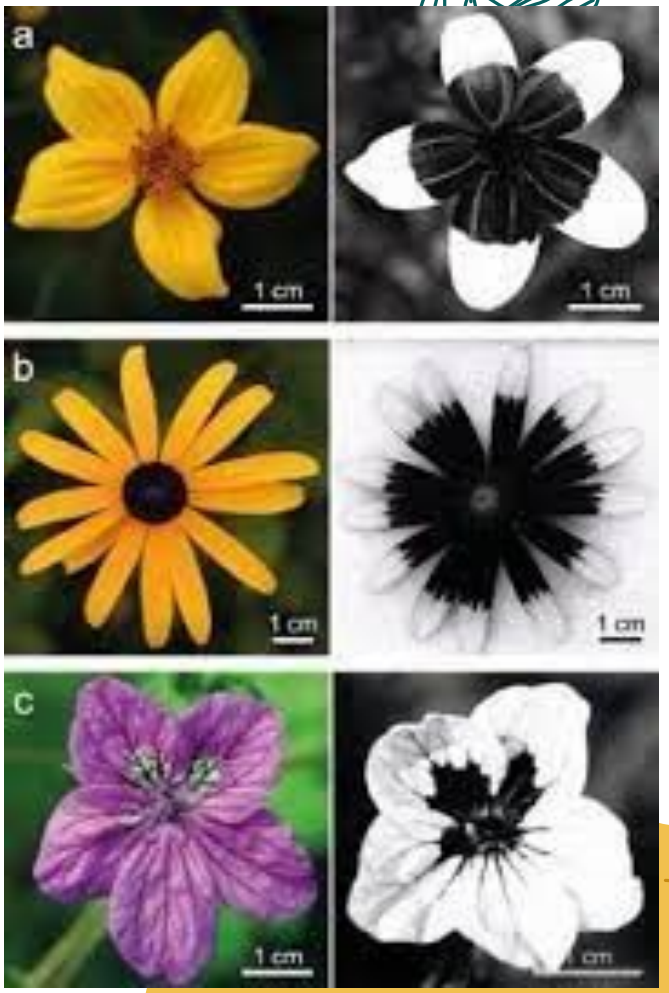

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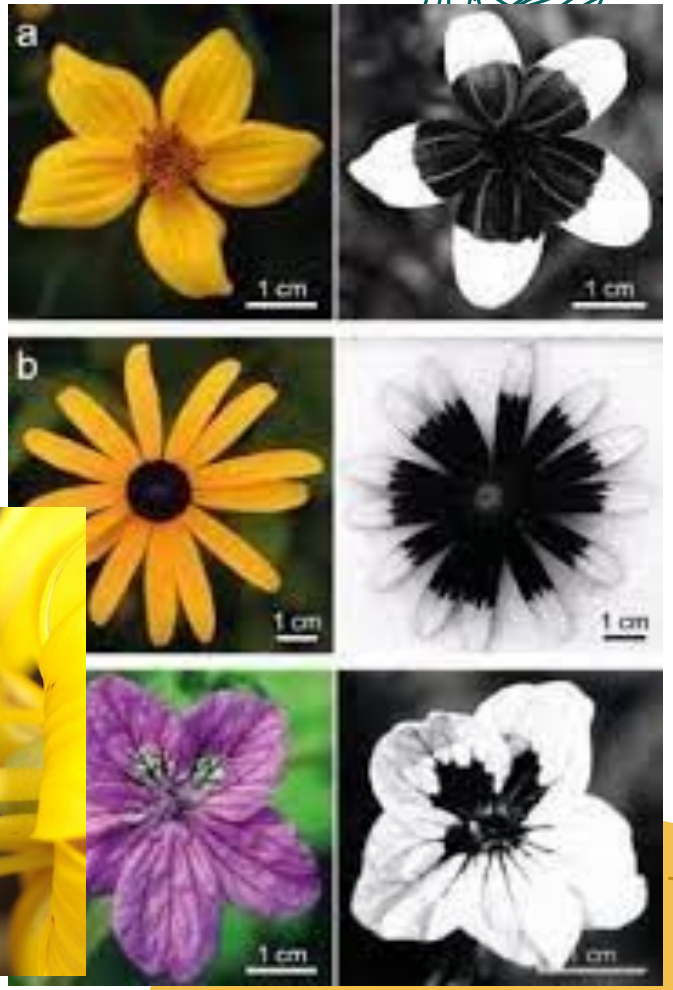
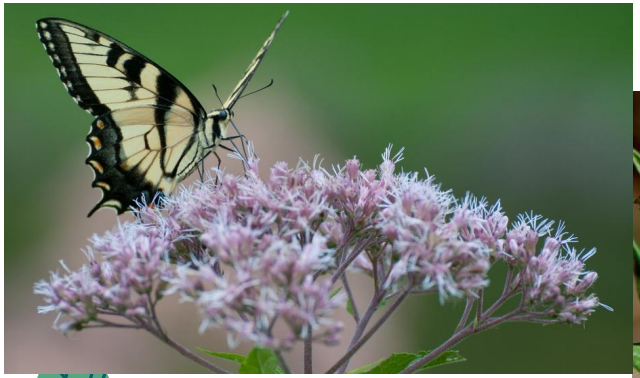
- Petals may form “landing platform”
- Flowers can have “nectar guide” patterns
- Some bees are pollen specialists



Butterflies and moths

- Butterflies like brightly colored flowers
- Large flower clusters
- Abundant nectar



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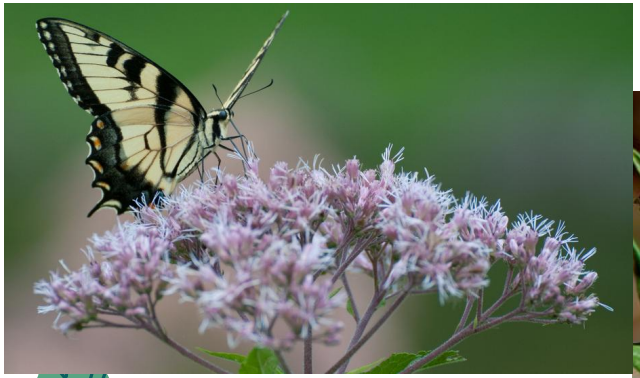
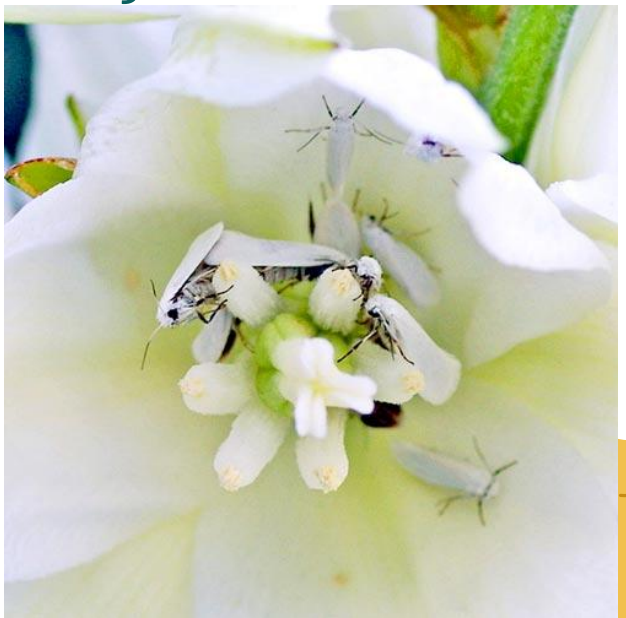


- Night-flying moths like pale flowers
- Strong floral scents



Bats

- Pale flowers
- Night-blooming
- Very fragrant
- Fruit crops like mango and banana

Birds

- Lots of nectar
- Flowers are often red
- Tubular flower shape

Not all plants are as sweet as roses...

Some plants use strategies to trick their pollinators.

Other plant strategies

Skunk cabbage

- Smells like dead things, looks like rotting flesh
- Makes heat that can melt snow!

Carrion Beetles and flies

- Attracted to dead things to lay eggs

Other plant strategies

Jack in the pulpit

- Fungal odor
- Trapping pollinators inside flowers

Fungus gnats

- Attracted to fungus

Other plant strategies

Bog Orchid

- Mosquito scent specific cues
- Smells like human B.O.

Mosquitoes

- Attracted to human odors
- Collects pollen on antennae

Sometimes pollinators cheat!

- They chew holes in the side of a flower and lap up the **nectar**
- They don't touch the **anthers** or **pollen** while doing this
- Meaning they don't do the job of pollination!

And many more...