Goldenrod visitors (some pollinators)

Bee orchid resembling female

Butterfly pollination of orchids

Fly orchid mimics female wasp and produces pheromones to attract male

Fly pollination of primrose

Hawkmoth pollination of orchid
Monkey beetle pollination in S. Africa

Carrion flowers (11 inches)

Carrion flowers and pollinator

Fig wasps in California

Female and male wasps

Female flower where female wasp enters

Male wasp mating

Female wasp emerging
Female wasps about to disperse

Myrmecochory in Bloodroot (Sanguinaria canadensis)
by Carin Stefanesco and Mercedes Ward

General Characteristics of Bloodroot
- Member of the Poppy Family (Papaveraceae)
- One of the earliest ephemeral spring flowers
- Blooms before leaves leaf out
- Blooms from April to June depending on geographical location
- Blossoms only last a few days

Seed Dispersal by Ants: Myrmecochory
- Seeds grow on a separate stalk
- Once ripe, seed capsule opens
- Seeds have external white fatty tissue (elaiosomes) that is attractive to ants
- Ants carry seeds to their nest

Ant carrying seed with visible elaiosome

Seed Fate
- The elaiosomes are eaten, but seeds remain viable
- The seeds are discarded with other nest waste
- Thus, this is an ant-plant interaction that is considered a mutualism because it is beneficial to both ants and plants
Food bodies for acacia ants

Domatia for ant mutualists

Search words used with Google image search

- Pseudocopulation orchid
- Beetle pollination
- Hawkmoth pollinator
- Myrmecochory
- Ant acacia pseudomyrmex