

The Life of a Plant

- **Reproductive Biology**
 - sex chromosomes
- **Developmental Biology**
 - embryogenesis
 - seed biology

Dioecious

male and female → on different individuals

Bisexual

Male and female on same plant

- hermaphrodite
- monoecious

- **Figure 10.3** - pollen lands on stigma and fertilization occurs.
- Sporopollenin protects pollen and is very durable and indigestible - can survive for tens of thousands of years. There's lots of different structures of plants and each one is associated with a different type of plant.
- Peat represents bog moss. Spruce will be present 5-6 metres deep which represents is being 10,000 years old. 10,000 years ago pollen, spruce forms later on.
- Humming bird- picking up pollen from anthers. Easier on the short styled plants than on the longer styled plants. Does this distinction between species enhance the ability of plants to out-cross and does it increase chances of survival? [Darwin's speculations]

Compatibility / Incompatibility

- Are genetically driven.
- Humans always outcross due to male and female organs and therefore we are dioecious- males and females on different individuals
- The reason why we have two different sexual individuals is based upon the fact that we have sex chromosomes. Most animals have sex