

Sex in Your Garden

Pollination Ecology











SEX

IN YOUR GARDEN

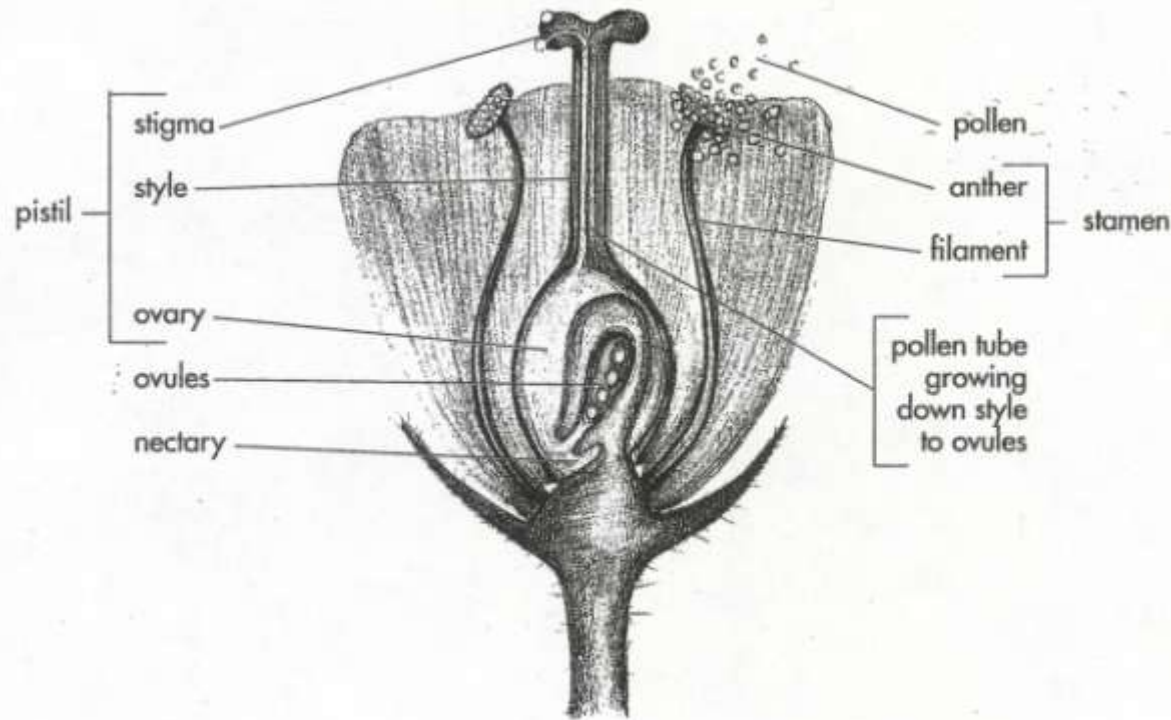


10 CHOICES — ONLY 1ST EACH
WITH ANY OTHER
ELIZABETH ARDEN PURCHASE
OF 5⁰⁰ OR MORE.

Elizabeth Arden
LONDON · NEW YORK · PARIS



Basic Floral Anatomy



from Sex in Your Garden by Angela Overy 1997

Special Floral Features

Nectararies



David Webb



Special Floral Features

Bracts



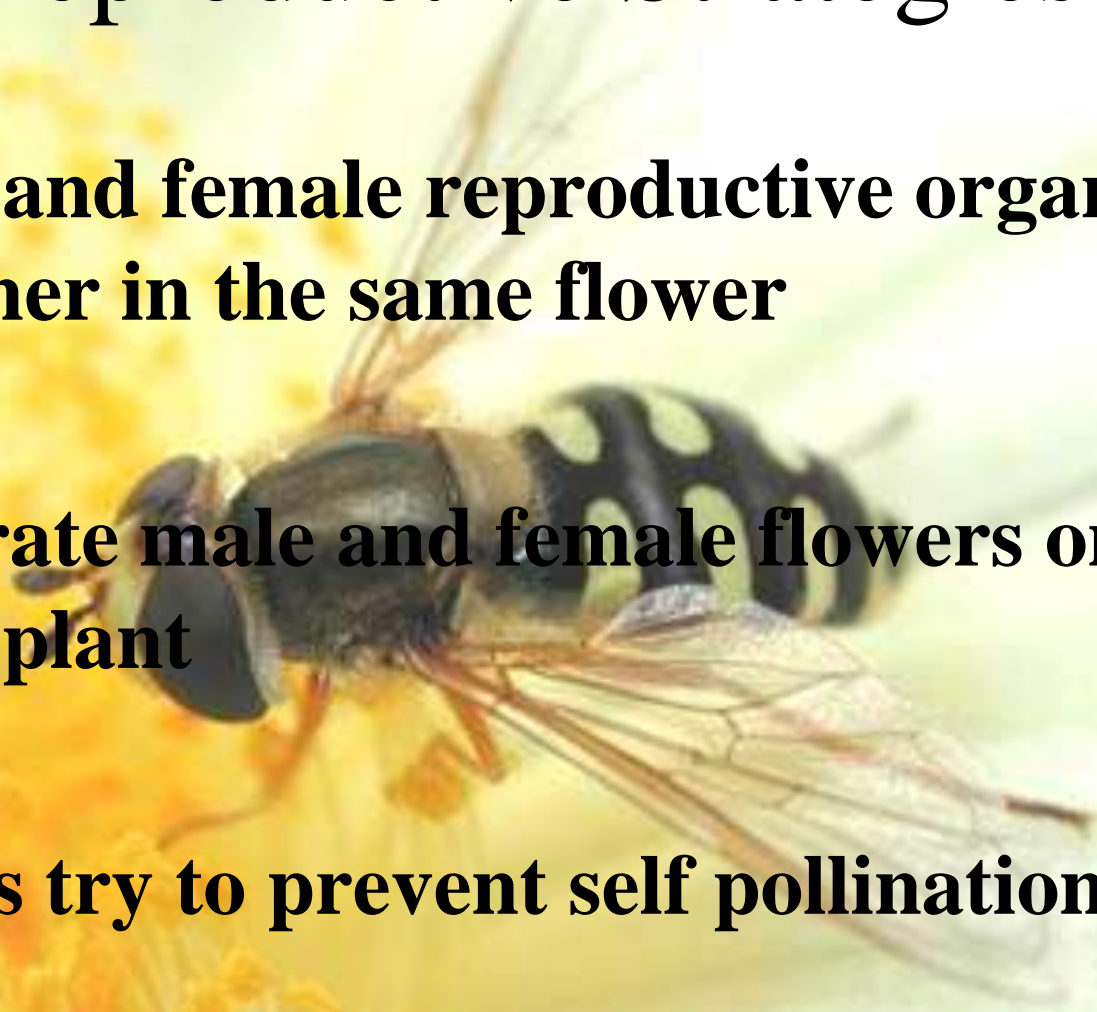


**Men are from Mars,
Women are from Venus**
Reproductive Strategies



Reproductive Strategies

- **Male and female reproductive organs together in the same flower**
- **Separate male and female flowers on the same plant**
- **Plants try to prevent self pollination**



Outcrossing *Xenogamy*



Within Flower Crossing

Autogamy



Between “Sibling” Crossing
Geitonogamy



**Attracting Attention in a
Competitive World**
The Ultimate Advertising Campaign



Color

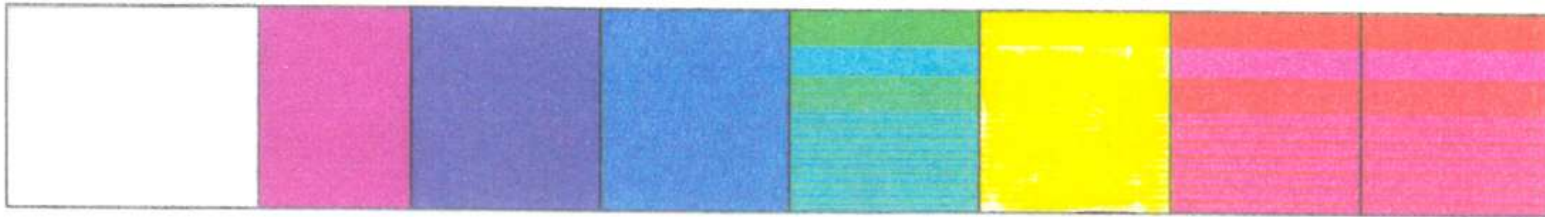
LIGHT SPECTRUM

Wavelength

Short

Medium

Long



Ultraviolet

Violet

Indigo

Blue

Green

Yellow

Orange

Red

Hummingbirds

Honeybees

Humans

Nectar Guides



Pollinator

Bees

Butterflies

Flies

Carrion flies

Hummingbirds

Bats & Moths

Wavelength

yellow, blue, purple,
uv

red, orange, yellow,
pink

green, lime, white,
cream

maroon, brown

red, orange, purple-red

pale yellow, white



Color Changes





Targets





A large, dense bush of purple flowers, likely a lilac, is the central focus of the image. The flowers are in full bloom, creating a thick canopy of purple. The background shows a lush green landscape with trees and a clear sky. The text is overlaid on the center of the image.

**Hmmm...Something Sure
Smells Good (or Not!)**

Scents



Ship Shape *Shapes*



Bowl-Shaped Flowers







Trumpet & Bell-Shaped Flowers







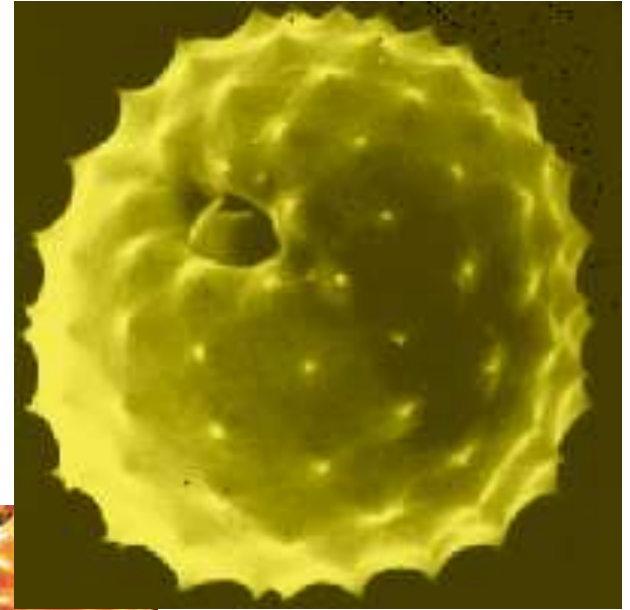
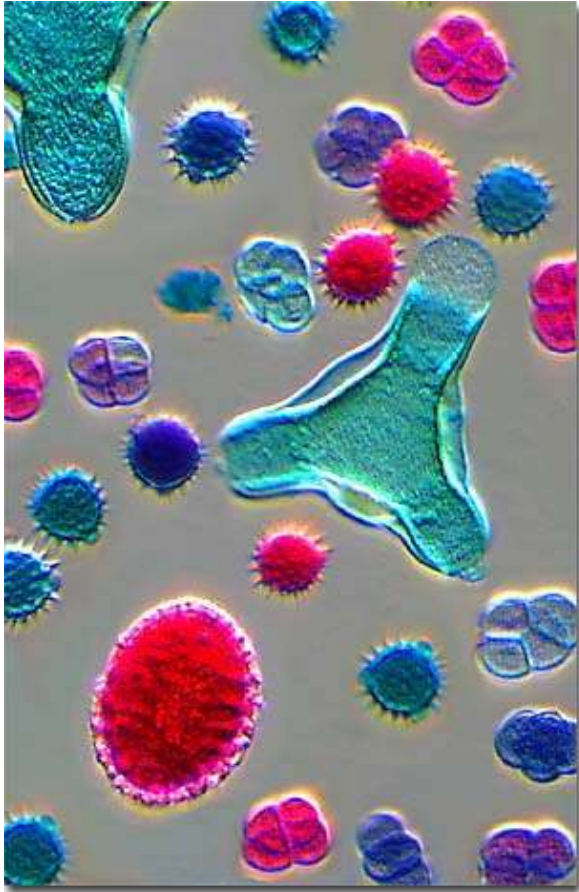
Landing Platforms







Pollen



To Bee or Not to Bee

Bee Pollination

- Most important group of flower visitors
- Feed on nectar
- Collect pollen to feed their young



To Bee or Not to Bee

- Like bright showy flowers
- Blue, yellow, uv
- Nectar guides



All Aflutter

Butterfly Pollination

- Guided to flowers by sight and smell
- Feed on nectar
- Prefer flowers with a fresh scent



All Aflutter

- Like yellow, red, orange, pink flowers
- Flowers with landing platforms
- Tubular flowers that will accommodate their long tongues



Things That Go Bump in the Night

Moth Pollination

- Guided to flowers by sight and scent
- Feed on nectar
- Like flowers that are white or faintly colored because they stand out against the night sky



What's That Smell?!

Fly Pollination

- Fly pollinated flowers look and smell like dead, rotting meat



etles *t Tanks*



COLOR

- Sturdy

Hmmmmmm: Hummingbirds

- Flowers are tubular
- Produce lots of nectar
- Red, orange, purple-red



Things That Go Bump in the Night 2

Bat Pollination

- Like white, dingy flowers
- Musty smelling
- Sturdy



Trick Me Once...



Pseudocopulation

- Flowers mimic female bees and wasps
- Color, shape hairiness
- Emit odors that smell like females of the species
- Males mistake the flowers for females and try to mate with them

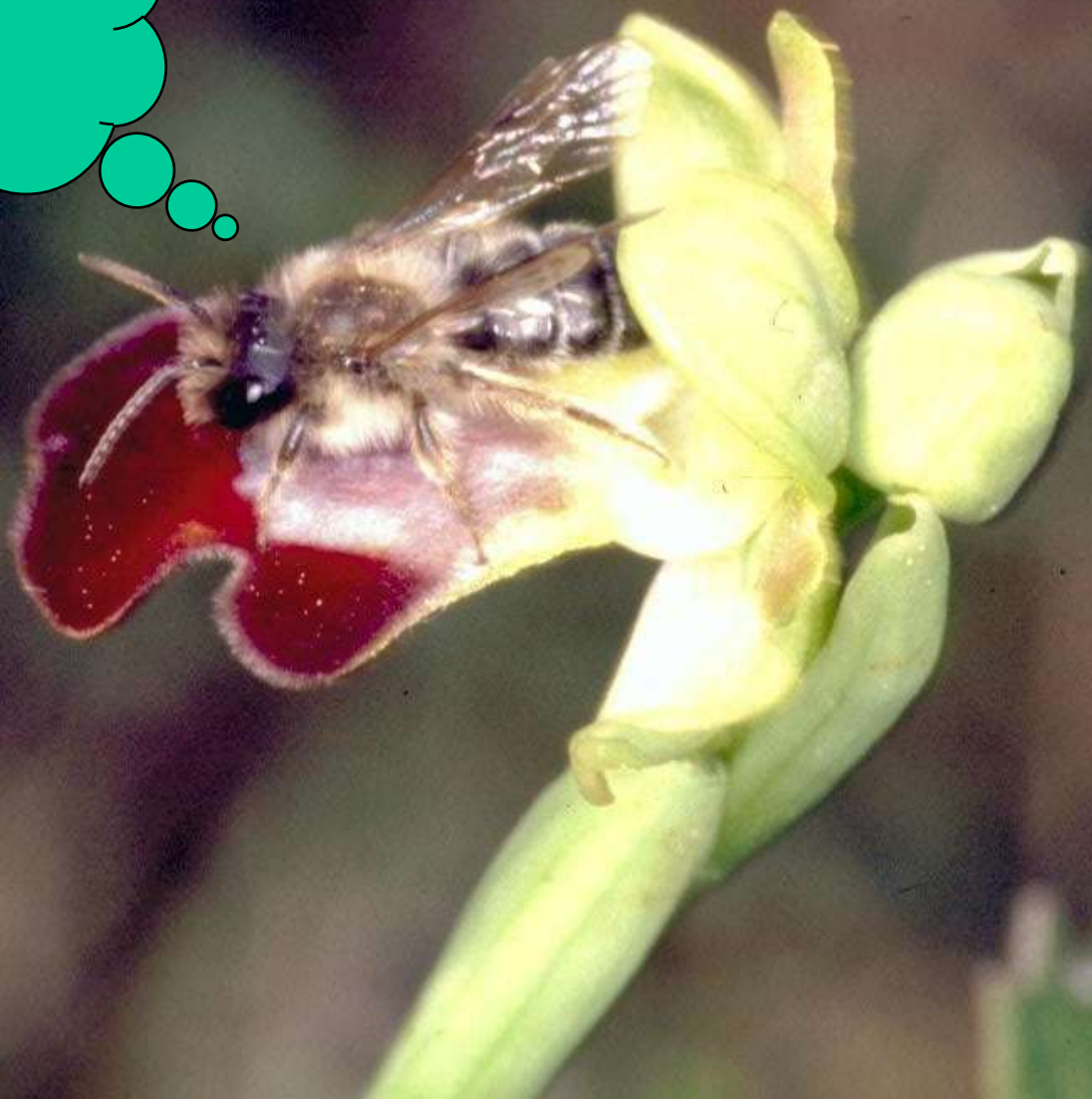


Pseudocopulation

- As the males try to mate with the “female,” they pick up pollen packets
- These pollen packets are transferred to another flower when the males try to mate with it



I'm confused...



Trapped Like a... Bee?





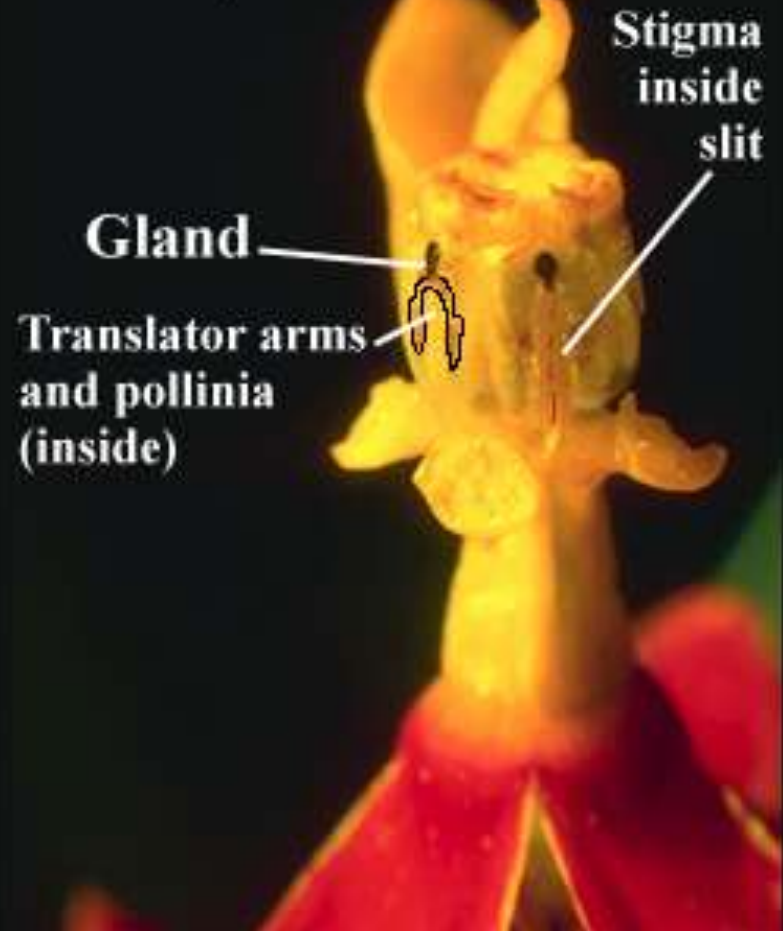
Murder Most Foul



Murder Most Foul



(some hoods
removed)



Final Thoughts

