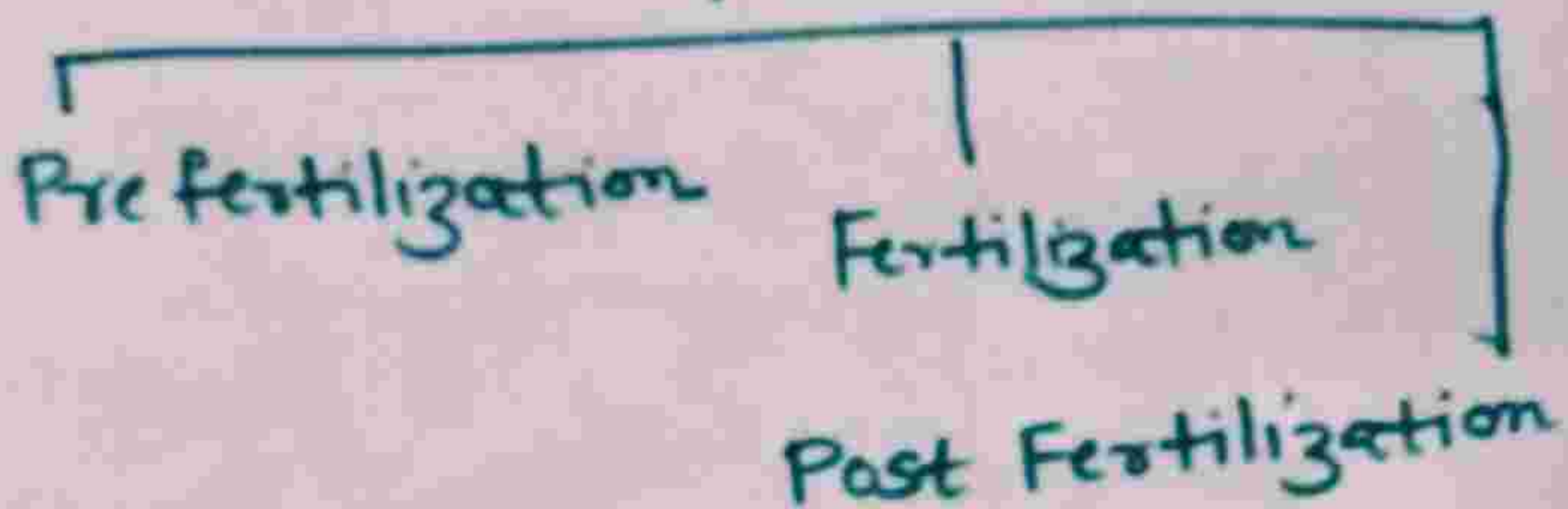


Events in Sexual Reprod

Three events



I Pre Fertilization Events

Gametogenesis Gamete
[Formation of gamete] Transfer

Gametogenesis

Gametes — Gametes (n) are

the cells which undergo fusion during Sexual Reproduction

→ In diploid organism gametes are formed by Meiosis.



Meiosis



Gametes.

→ Two types of gamete.

♂ male gamete

♀ female gamete

→ Types of gametes on the Basis of Morphology

Homogametes

Heterogametes

e.g. Algae or Fungi

Isogametes

Anisogametes

Oogametes



Zygote (2n)



Zygote (2n)

Same Physically and Physiologically

Anisogametes.

different size but
same motility

e.g Algae and fungi



Zygote (2n) oogamy

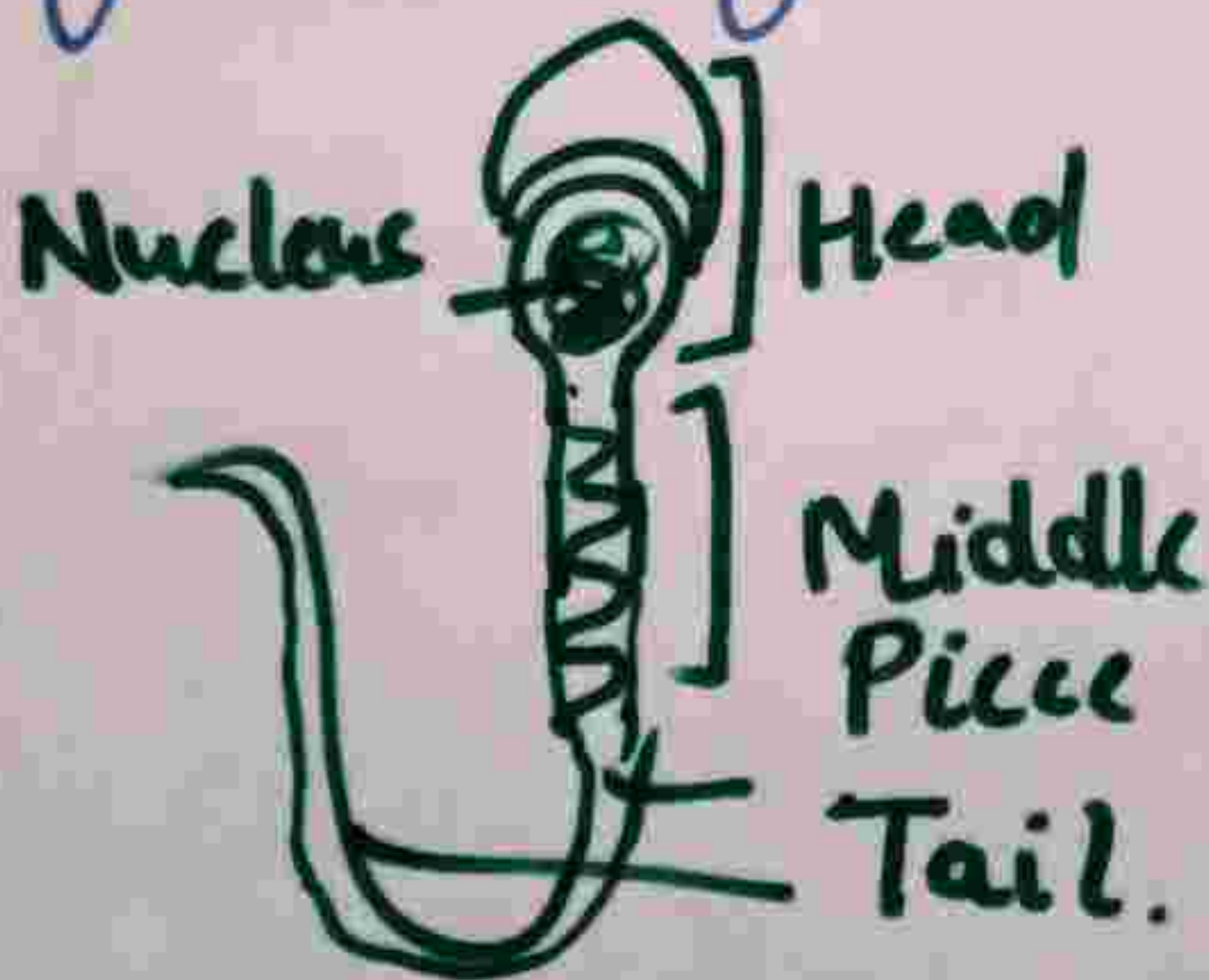


Sperm
(Micro-gamete)

ovum
[Macro gamete]

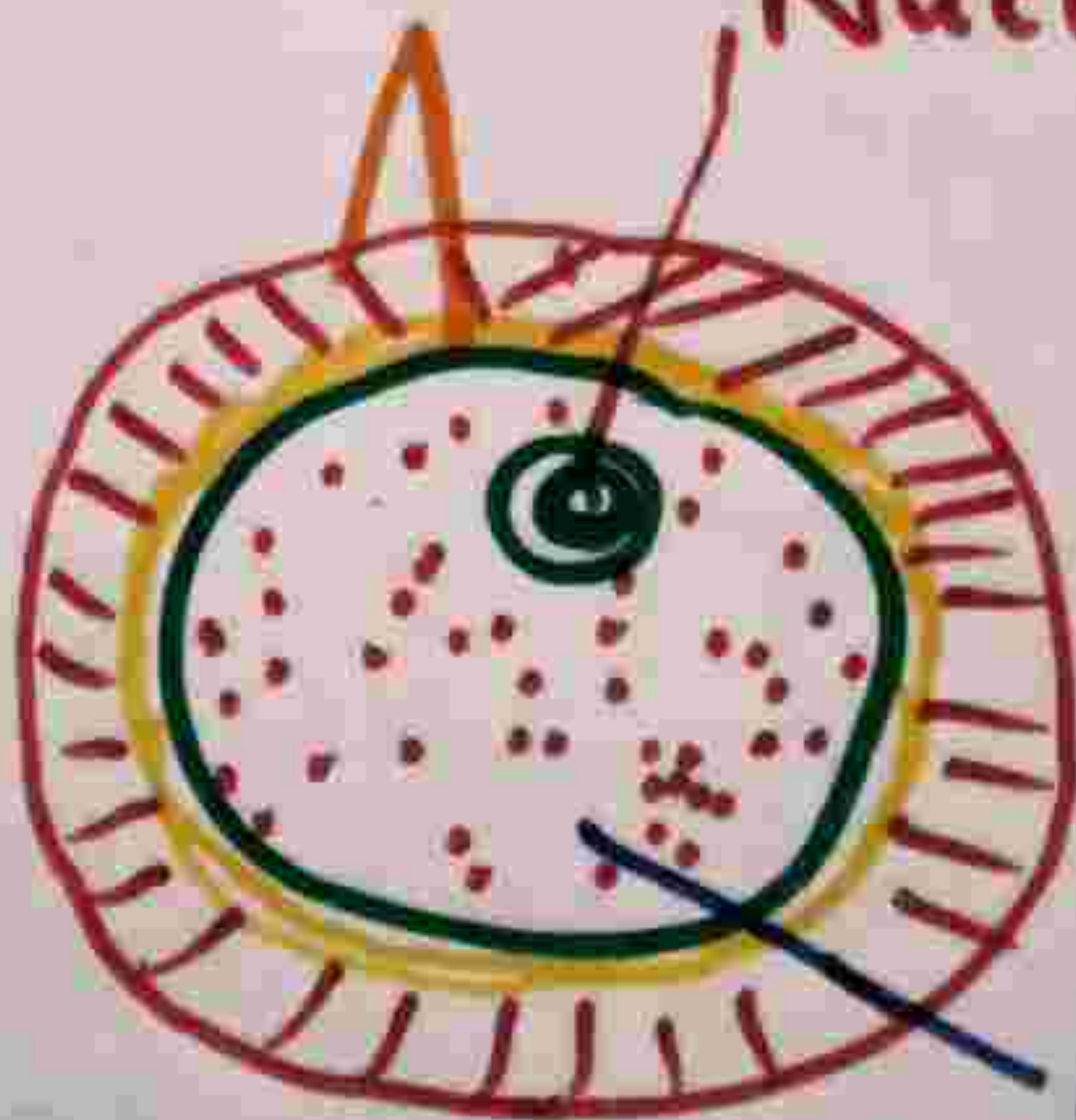
Male gamete Small
Motile. Female
gamete Large in
size and non motile

Membranes **Nucleus**



Human
Sperm

♂
gamete



ovum **cyto-plasm**
♀ gamete.

Sexuality in organism

Two types of organism

Unisexual

↓
Male and female
reproductive structures
in ~~same~~ ^{different} individual.

Bisexual
or
Hermaphrodite.

↓
Male and
female
reproductive
structure
in same
individual.

→ In Plants, Two types

Monoecious

Dioecious.

↓
Same plant
Male and female
flowers
present
e.g. cucurbits

↓
Male and
female flowers
present on
separate plants
e.g. Date -
Palm
Papaya

E.g of Monoecious

1. Bryophyte - Funaria

2. Gymnosperm

e.g Pinus

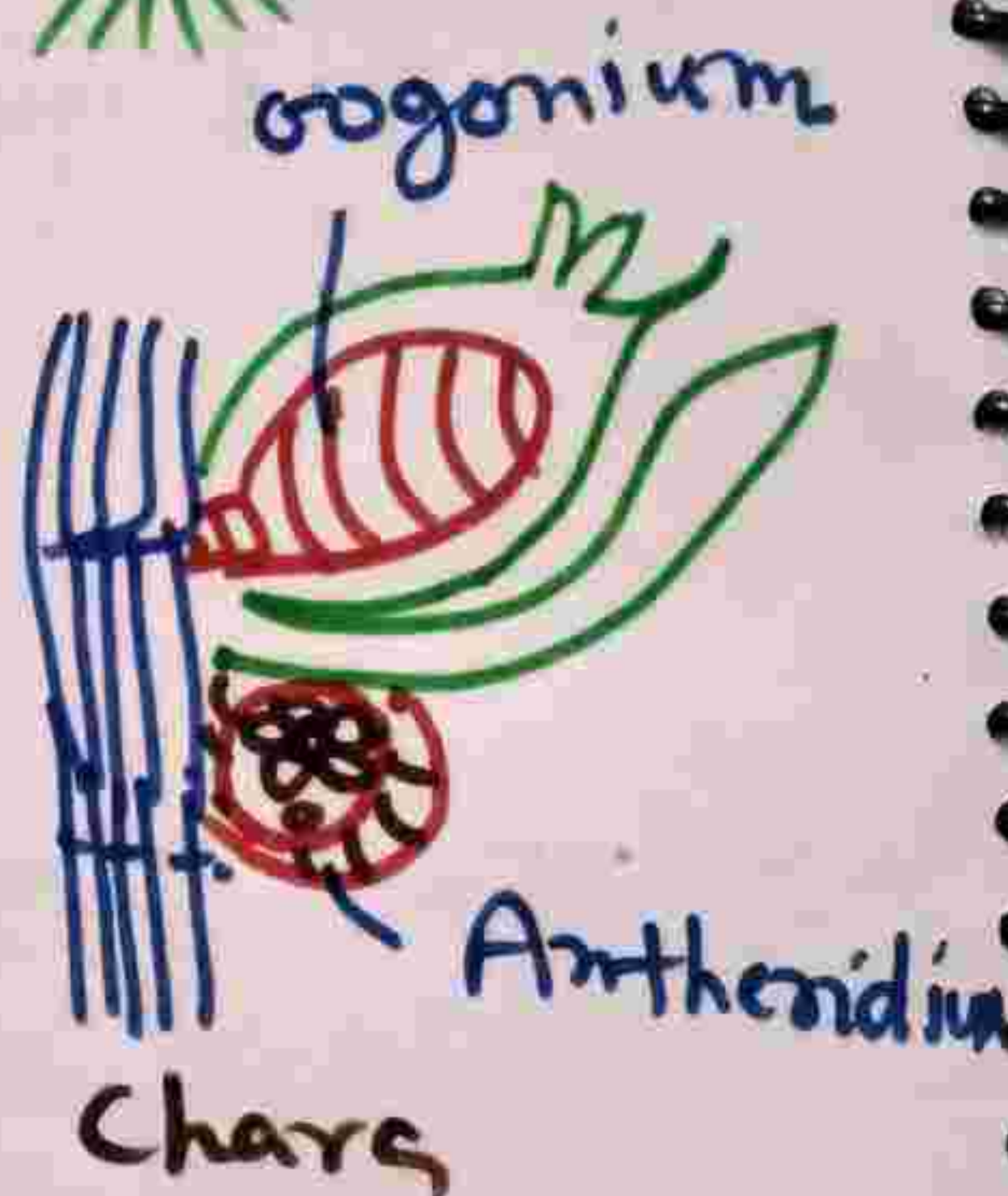
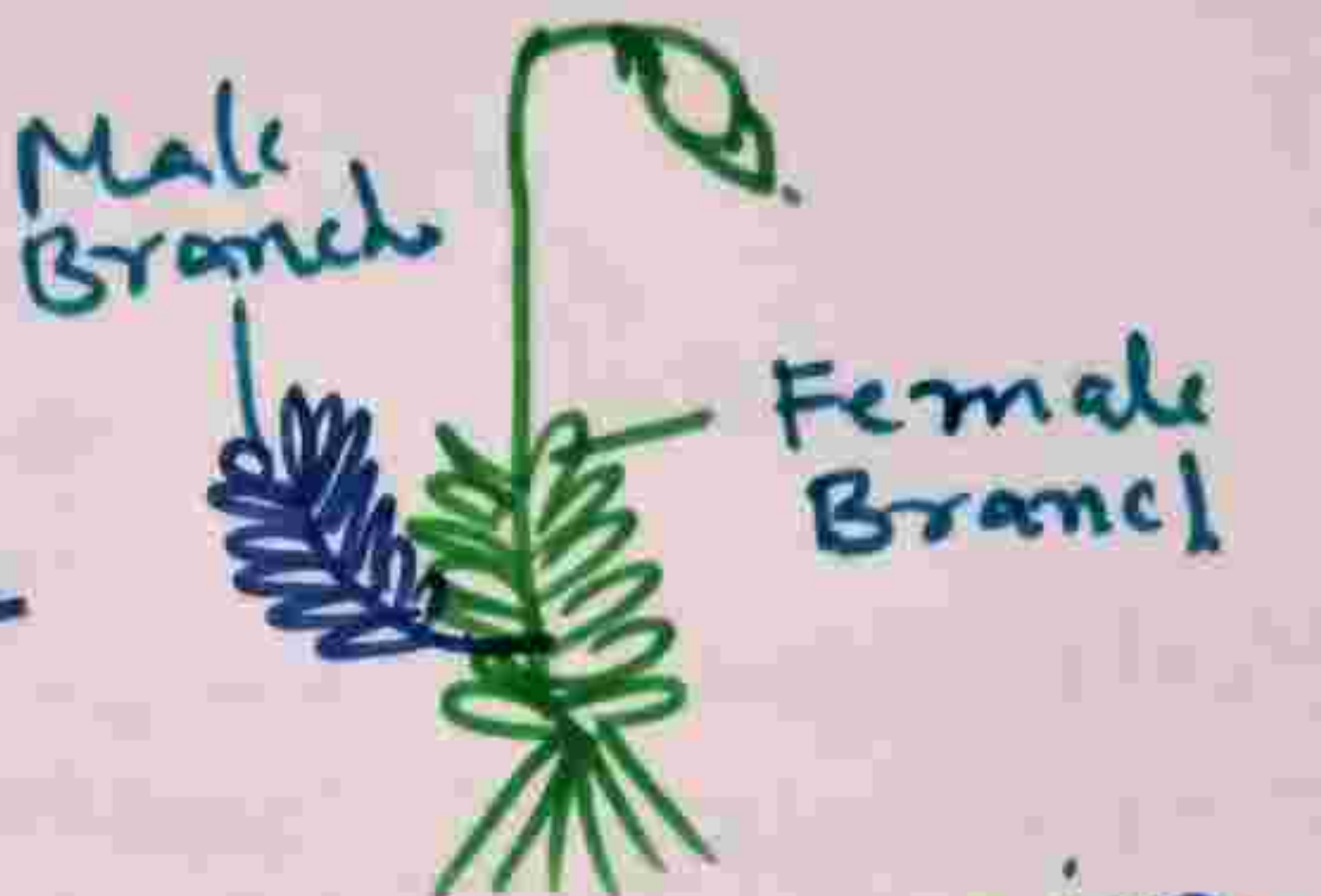
3. Angiosperm

e.g Maize

cucurbits
Coconut

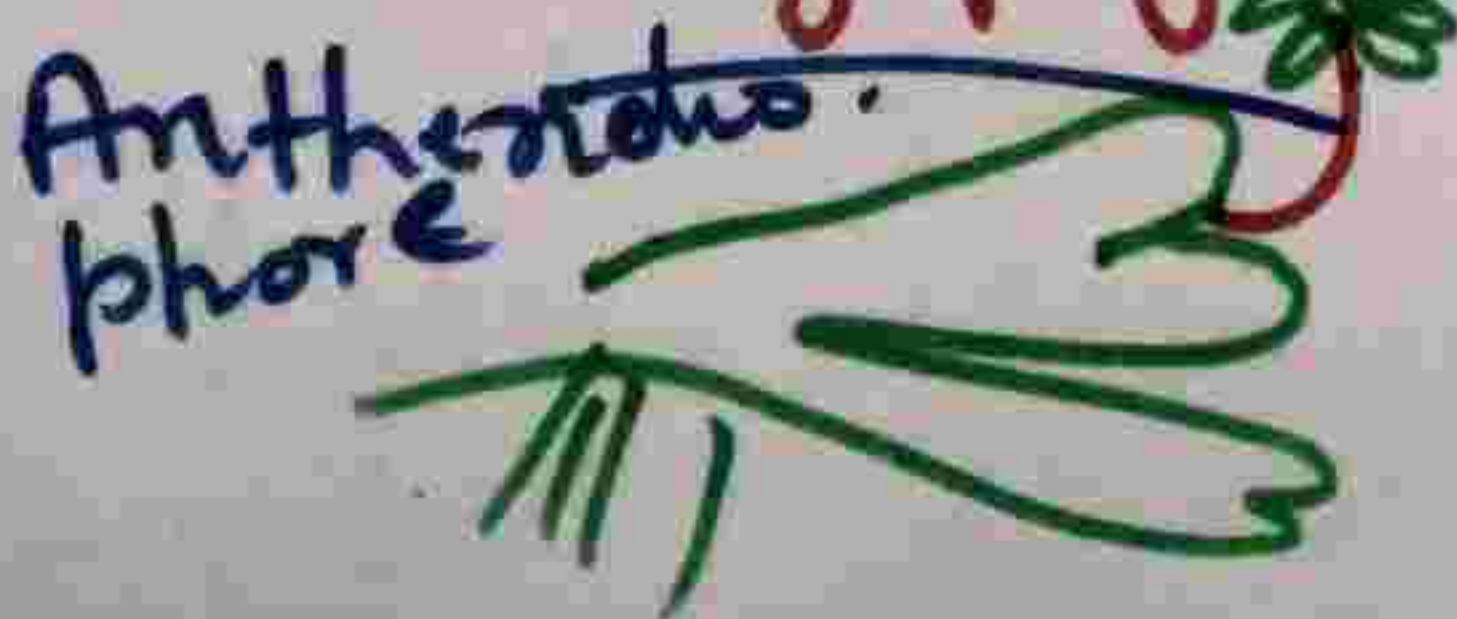
4. Algae.

e.g Chara



E.g of Dioecious

1. Bryophyte - Marchantia



- Pteridophyta — Selaginella.
- Gymnosperm — cycas
- Angiosperm — Papaya
Date palm
Vallisneria.
- Algae — Chlamydomonas.

In Animals

Unisexual
 → cockroach
 → Humans
 Most of
 Animals.

Bisexual
 Sponges
 Tapeworms
 Earthworm
 Leeches.

→ Bisexual Animals

Protandrous
 ↓
 Male sex organs
 mature prior to Female
 sex organs
 e.g. Earthworm

Protogynous
 ↓
 Female sex
 organs mature
 prior to Male