

# Reproductive Isolation

2004

August

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Thursday

Wk 34 232-134

## Introduction:-

The phenomenon of segregation of a population into many sections is called 'Isolation'. All the factors which divide a species into such groups which are unable to interbreed are called isolating factors or mechanisms.

The term Isolating Mechanism was first coined by DOBZHANSKY (1937).

The isolating mechanisms serve as external as well as internal barriers.

~~class~~ Reproductive isolation was coined by MAYR (1942).

In reproductive isolation, the gene exchange between population is prevented because of genotypically conditioned differences between the population.

Reproductive isolating mechanism is defined as any genetically determined agency which prevents the interbreeding of Mendelian populations.

Recently these have been categorized as follows by Meckam.

SEPTEMBER

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Appointments

2004

# Reproductive Isolation

## Post-mating Isolation

### Internal Barriers

- Gametic mortality
- Zygotic mortality
- Hybrid inviability
- Hybrid sterility
- Hybrid breakdown

## Pre-mating Isolation

### External Barriers

- Geographical isolation
- Spatial isolation
- Climatic isolation
- Seasonal isolation
- Ecological isolation
- Mechanical isolation
- Ethnological isolation
- Physiological isolation

Appointments

AUGUST

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