

Dr. Rachana Shalini

Deptt. of Botany

Class : 12th

Unit 1: (Sexual Reproduction)

Chapter: Development of Seed and Fruit

Topic : Seed and Fruit Formation

Lecture no. - 14

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Seed and Fruit Formation :

Seed and fruit formation in Angiosperms is stimulated by the act of fertilization.

- In angiosperms, double fertilization produces two structures - a diploid zygote or oospore and a triploid primary endosperm cell.
- Endosperm cell gives rise to a nutritive tissue called endosperm.
- Zygote forms the embryo.
- Endosperm provides nourishment to the growing embryo.
- With the growth of embryo, the central part of the endosperm is eaten up.
- Endosperm in turn, corrodes over the nucellus.
- As the embryo reaches maturity, its further growth is suspended due to development of growth inhibitors, abscission of funiculus or changes in

integuments .

- The cells of the integuments lose their protoplasm, develop thick and impermeable walls.
 - The integuments thus get transformed into seed coats, outer testa and inner tegmen.
 - The tissue of the ovary wall is also stimulated to grow with the development of the seed.
 - It produces a fruit wall or pericarp.
 - In some cases, thalamus and other floral parts also show proliferation along with the development of the ovary wall.
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