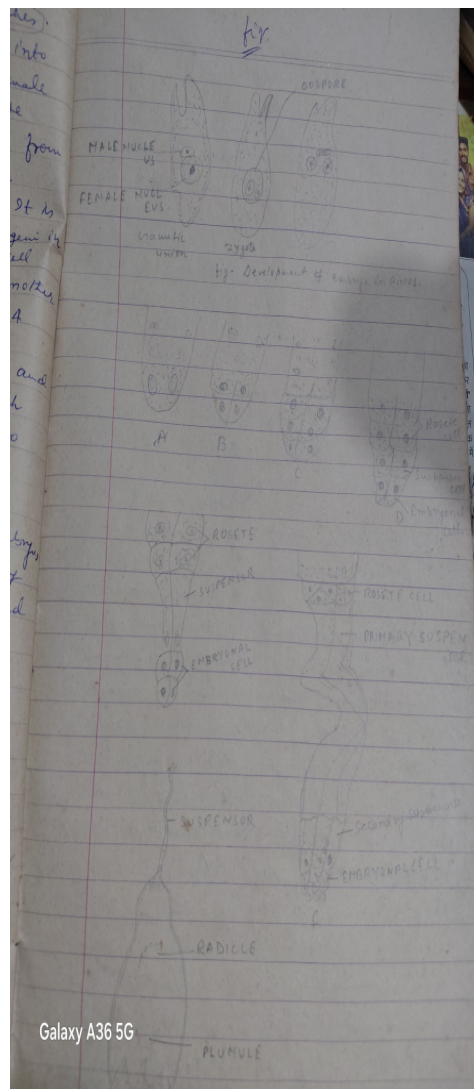




Galaxy A36 5G

Cells: tiers elongated and twisted.
 Its cell of its embryo ties into
 its food latent tissue of female
 gametophyte or endosperm. The
 suspensor ultimately separate from
 one another, each carrying an
 embryonal cell at its tip. It is
 a curious feature of embryogeny in
 pinus that its 4 embryonal cell
 normally separate from one another
 and develop independently into 4
 embryos. Now both the suspensor
 primary and secondary, elongates and
 become coiled and twisted. Each
 embryonal cell further divides into
 quadrants and octants forming 2
 potential embryos. Thus from each
 endospore in pinus 4 potential embryos
 are formed developed. Although only
 one of them matures. This is called
 polyembryony or more strictly,
 cleavage polyembryony. This is
 also an important characteristic
 of Coniferales. Some workers like
 Bockholz (1931) has reported the
 formation of rosette embryo from
 rosette ticks. Finally the seeds are
 formed from the developing embryo
 third year.

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Development of Pinus embryo

The development of pinus embryo is unusual because whole of the suspensor doesn't take part in the formation of the embryo. The fertilized diploid embryo of suspensor passes towards the lower end, divides twice and the four nuclei thus formed lie at the bottom of the suspensor. By third nuclear division 8 nuclei are formed. These arrange themselves in two tiers of four and the lower four being cut off by walls the upper four are separated only by the imperfect walls and have no wall at upper end. Lower cell also divides and two more cells structure called the proembryo is formed. These four tiers beginning from below are respectively called the embryo tier, the suspensor tier, the scutella tier and the upper tier. The cells of the upper tier also known as the open tier and play no further part and soon disintegrate. They simply supply nutrition to lower tiers of proembryo. Thus by transverse division of the lower tier cells, suspensor cells are formed. The secondary suspensor cell which is formed from the primary suspensor cell is termed as embryonal tube. This symmetrical grouping of the proembryonal cell is characteristic of order Coniferales. The cells of the suspensor