

OVARY CULTURE

Whole horticulturist tried to you to the quality of the fruit by using various chemicals. In such studied the culture excide ovary supplied directly with the chemical as great importance.

NITSEN (1951) successfully culture excide embryo of several plants. Such as *Lycopersicon esculentum*, *Phaseolus vulgaris*, *Cucumis anguria*, *Fragaria* sps etc. The excide ovary of *Cucumis* and *Lycopersicon* produce fruit with visible seeds on culture. But these fruit are smaller than normal size.

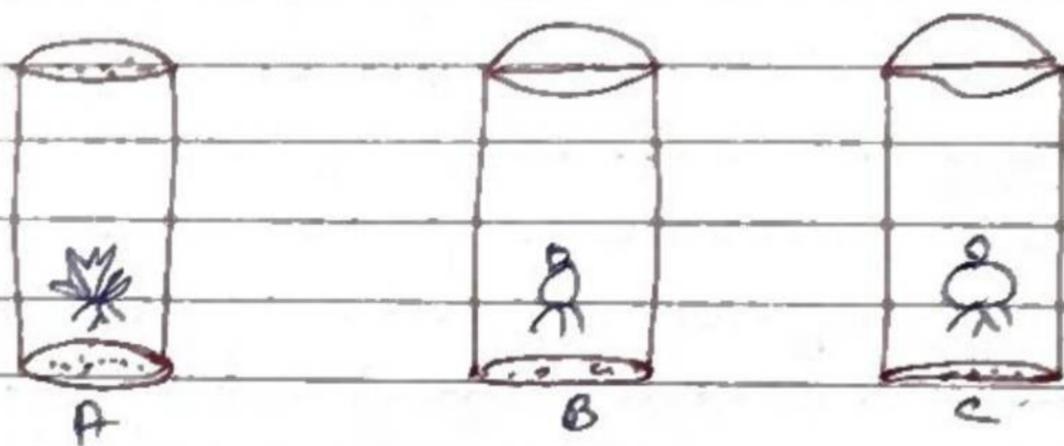


Fig: - ovary culture of *Lycopersicon* on artificial medium.

- (A) just excised flower.
- (B) Culture of excised ovary.
- (C) Small fruit produced on culture.

Maheswari 1958 successful cultured ovary of *Iberis amara* excide one day after pollination on a medium containing mineral salts. In such a medium smaller embryos are called.

But if the medium is supplied with B. Vitamins then healthy fruits of normal size developed. Addition of IAA to this vitamins contain constant medium further in besides of fruit.

(Maheshwari and Lal 1958) ovaries excise as zygote st. stage develop in culture and seen in *hyoscyamus*. Niger Bajaj 1966 and *Anethum graveolens* (Chin and Sehgal 1966). If coconut milk is added to the medium then larger fruits are produced.

In several plants, such as *Allium*, *Althea*, *Horadum*, *Hyoscyamus*, *Iberis*, *Triticum* etc. It has been noted that the presence of sepals helps fruit development. In absence of several fruit development is poor. Guha and Johry 1966, demonstrated it in *Allium*.

Nish supplemented with vitamins glycine and yeast extract is most suitable for ovary culture. ovaries of *limaria*, *Maroccana* were gone on this medium were bigger than its natural size.

Ovaries excise after pollination can produce fruit on simple medium contain mixture of sugar and vitamins. Ovaries taken from unpollinated flower boil to produce fruit on such a simple medium unpollinated flower may develop into seedless fruit on a medium supplemented with hormones. In *Lycopersicon*. Nitsch (1951) obtained seedless fruits by culturing unpollinated ovary on a medium supplemented with 2-4-D or 2-Naphthoxy acetic acid. Chopra (1958) obtained parthenocarpic fruits of *Althea rosea* acid pollination stimulus is required for ovary and seed development

given by most apomicts. Only female plants of Herva Tomentosa growing in Delhi is an apomict: Puri (1963) cultured excise spikes flower. Ovaries etc of this plant and noted that on medium supplied with IAA and yeast extract portions of spike grow well and produce seed, which are comparable that growing in nature fruits production on ovary culture usually contain few seeds for NITSH (1951) observe this in ovary culture of Iberis, Hyoscyamus and Linaria on basal medium. Aethum requires a supply, coconut milk for normal seed development significance of ovary culture →

- (i) By ovary culture the physiology and food development can be studied.
- (ii) By ovary culture haploid can be produce unfertilized ovaries. Hardium vulgare Aestivum development in to
- (iii) Dormancy period of seed can be reduced by ovary culture. Achenes of Ranunculus sceleratus remain dormant for one year under normal condition but culture and no of dormancy period (Sacher and Coluba 1962)
- (iv) Rare hybrids can be also produced on ovary.

