

'parthenocarpy' and  
water melon.  
thompson seedless  
due to



**ASSIGN  
BUSTER**

'Parthenocarpy' which refers to the development of fruits without fertilization or even without the stimulus that comes from pollination. If a parthenocarpic fruit develops even without the stimulus from the pollination, then this phenomenon is vegetative parthenocarpy e. g. banana with the stimulus of pollination, stimulative Guava and water melon. Thompson seedless due to stimulative pollen- aborted embryo.

**Need:**

Greater preference among consumer owing to its quality and hence fetch higher prices than the seeded fruits e. g. seedless grapes, guava or oranges. Besides the problem of unfruitfulness may not arise if a fruit developed parthenocarpically and the grower is assured of his crop e. g. banana.

**Drawback:**

Fruits are usually small in size (grapes) and irregular in shape (guava).

**Induction of seedlessness:**

1.

Use of growth regulators. Application of GA3 7000-8000 PPM in lanolin paste on the cut end of the style of emasculated flowers of guava results in seedless. 2.

By changing the ploidy level. In Japan, it was domesticated that by developing a triploid water melon ( $3n = 33$ ) by crossing tetraploid x diploid variety, seedlessness can be achieved. [The seedlessness in naturally

available seedless guava var is due to autopolyploidy (triploid) and not due to parthenocarpic fruit development]