

## **Effect of different environmental factors and growth regulators on sex expression in cucumber.**

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There are wide range of flower morphology, and different rates of male, female and hermaphrodite flowers cucumber. Flowers are always affected by environmental condition and growth regulators.

The factors that affect on flowers include: temperature, photoperiode and light intensity. There is interaction effect between short day and cool night in *forming female flowers in monoecious cultivars. Most cultivars and lines have more female flowers in high intensity light than is low intensity light.* The effect of photoperiode is different on sex expression. In some reports, number of female flowers increased in short day condition, but in another experiment that conducted on monoecious cultivar, maximum female flowers were achived in long day condition. High temperature increased male flowers percentage especially at night in some monecious cultivars, but low temperature increased female flower percentage.

Chemical materials affect sex expression. Some materials that increased the number of female flowers includes: Etephon, Auxin, and maleic hydrazide. GA, AgNo<sub>3</sub> and AVG increased the number of male flowers.