Definitions Related to Canola

Herbicide Systems:

Round Up Ready, Liberty Link, and Clearfield are the three herbicide systems used in Canola production.

Round Up Ready, and Liberty Link are products of genetic modification (GMO). Clearfield and Conventional Canola are products of traditional plant breeding and not considered as genetically modified (non-GMO).

HERBICIDE TOLERANT VARIETIES	
LIBERTY LINK® IGNITE® HERBICIDE TOLERANT	CLEARFIELD® production system
Roundup Ready® CANOLA	

GMO: Genetically Modified Organism.

Genetic Modification: The transfer of genetic information, a gene, via biotechnology from one species to another. IE. Gene for frost tolerance from fish moved into canola. Roundup Ready Canola contains a gene from Bacteria conveying resistance to Roundup. Gene for Cancer from humans into mice is also GM.

GM Canola: Canola variety developed with the use of Genetic Modification.

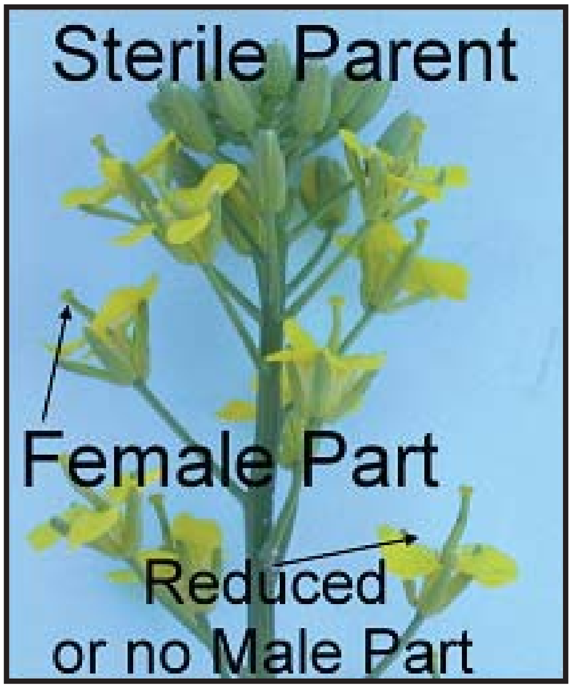
Conventional Canola: Canola variety developed with out the use of Genetic Modification

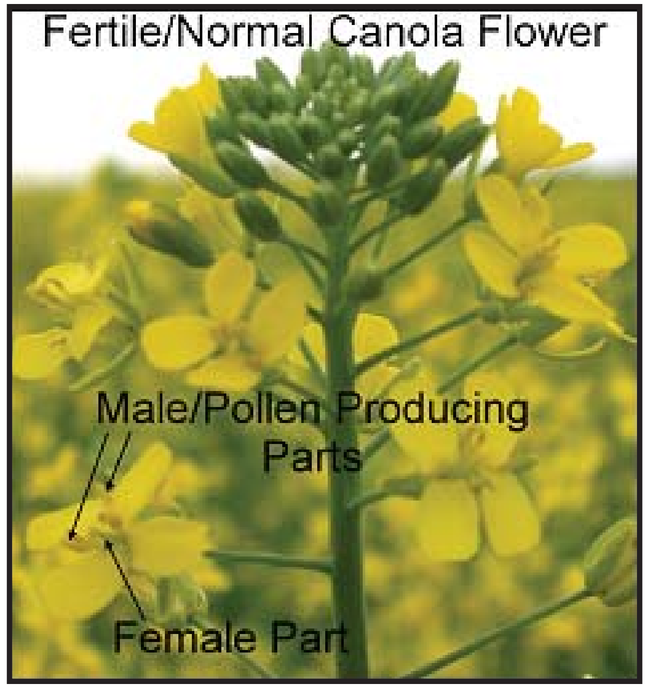
Male, Female, Sterile Flowers in Canola: Canola flowers normally carry both male and female parts. A canola flower is normally able to set seed when the male part of the flower pollinates the female part of the same flower. Female part of flower becomes the pod. The male part of the flower produces pollen.

Open Pollinated Canola Variety (OP): Variety that is produced under a breeding system that uses a single pure line for the seed production.

Hybrid Canola Variety: Variety that is produced under a breeding system that uses a mechanism for controlled pollination of a female parent by a male parent in seed production and that harvests only seed from the female plants for sale as seed to growers.

Synthetic (Synthetic Hybrid) Canola Variety: Variety that is produced under a breeding system that uses a mixture of female plants and male plants in seed production and that harvests both seed from female and male





Male Parent Pollinator, Restorer Line: Breeding or parent Line used in Hybrid Variety or Synthetic Variety seed production that produces pollen to fertilize the sterile female parent. The male parent also transfers genes that restore the fertility in the seed produced on the female parent so it produces plants with flowers that produce both male and female parts.

Female Parent, Sterile Line: Breeding or parent Line used in Hybrid Variety or Synthetic Variety seed production that has flowers, which only have functional female part. Male parts are absent, greatly reduced or unable to produce viable pollen for fertilization of the female flower part. The Female parent needs pollen from another plant to set seed.

Hybrid Seed Production Requires Separate planting of male and female lines. Only the seed on the female line is harvested and sold for Certified Seed. Bees are used to move pollen.

Synthetic and Open Pollinated Production Harvests all the plants in the field. Synthetic seed is a mixture of Hybrid Seed and the Male Parent. OP is a pure line produced under normal CSGA isolation.