

Interaction: Homozygous recessive of either gene A or B produce white

9/16 Purple
 7/16 White
 White flowers × White flower
 CCpp × PPcc
 CcPp × CcPp
 Purple × Purple
 CP = 9 Purple
 Cp = 3 White
 cP = 3 White
 cp = 1 White
 9 : 7
 Purple : White

	CP	Cp	cP	cp
CP	CCPP Purple	CCPp Purple	CcPP Purple	CcPp Purple
Cp	CCPp Purple	CCpp White	CcPp Purple	Ccpp White
cP	CcPP Purple	CcPp Purple	ccPP White	ccPp White
cp	CcPp Purple	Ccpp White	ccPp White	ccpp White

(d) Duplicate genes with cumulative effect (9:6:1):

Certain phenotypic traits depend on the dominant alleles of two gene loci. When dominant is present it will show its phenotype. The ratio will be 9: 6: 1.

Example:

Complete dominance at both gene pairs, interaction between two dominance to give new phenotypes.

Fruit shape in summer squash

Gene pair 'A' sphere shape dominant over long.

Gene pair 'B' sphere shape dominant over long.

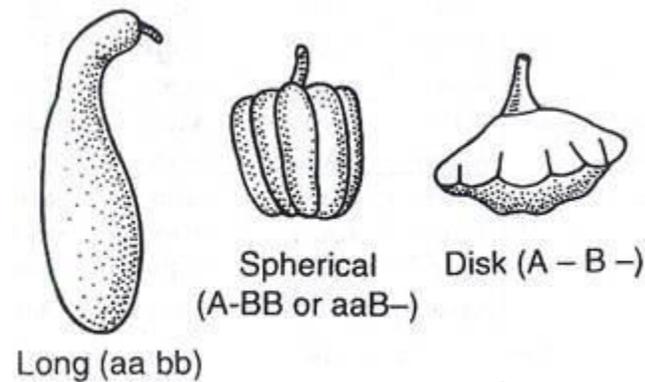


Fig. 39.1. Shape of summer squash.

Interaction at 'AB' when present together, form disc-shaped fruit (Fig .39.1)

Disc shaped fruits 9/16

Preview from Notesale.co.uk
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