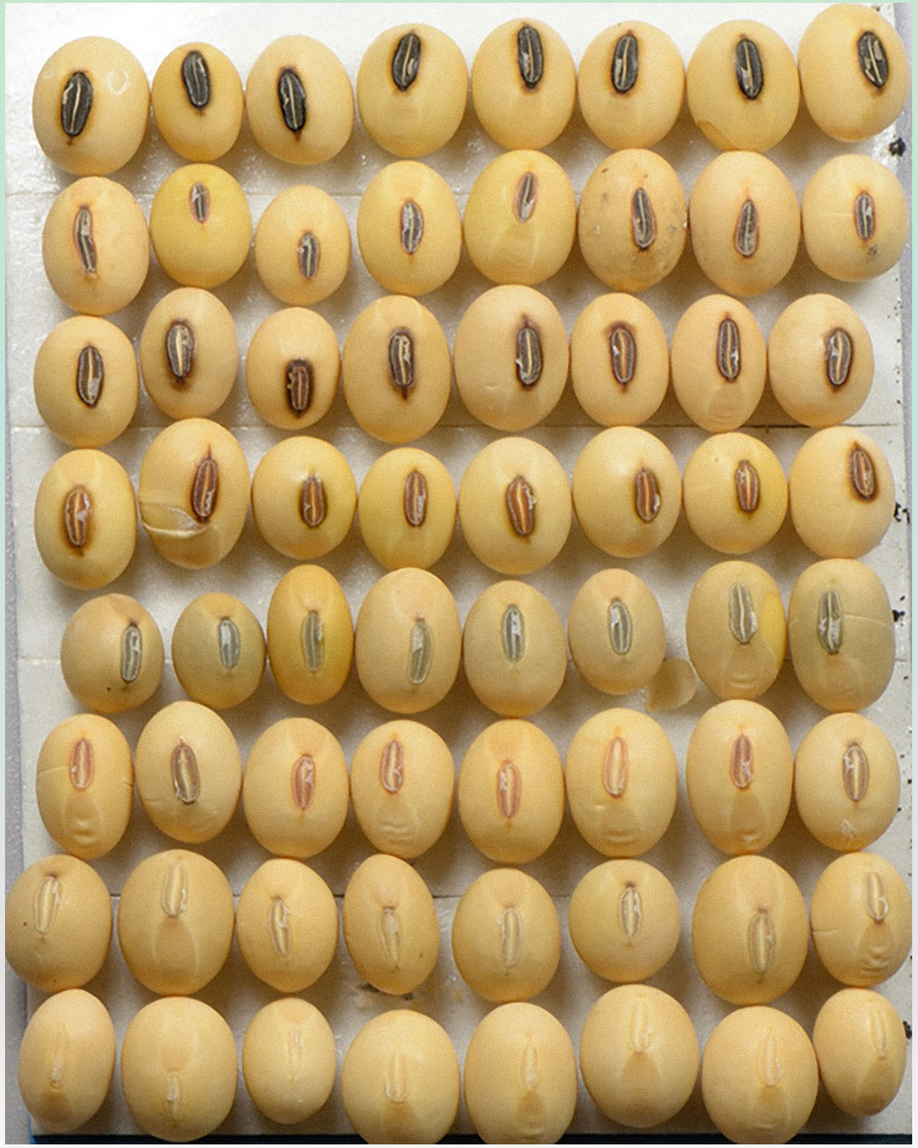
Heritable traits in soybeans

GROW
NEXT GEN

Hilum color

- A spot where the bean is attached to the pod
- Can vary in color from black to yellow
- Some importers of soybeans want a particular hilum color for the beans



inspection.canada.ca/plant-health/seeds/seed-inspection-procedures/soybean/eng/1347209394341/1347209477717

Pubescence




- Hairs that grow on the pod
- Hair colors vary from light brown, brown, and dark brown, to gray
- Pod color is independent of the hair colors

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Light brown pubescence


Brown pubescence


Dark brown pubescence

Grey pubescence

Pod color

- Color of pods can vary from light brown to black

Black pods

Dark brown pods

Brown pods

Light brown pods

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Abscission layer

- Lacking if the beans have an extra attachment on the hilum (where they were attached to the pod)

On left: have abscission layer

On right: lacking abscission layer

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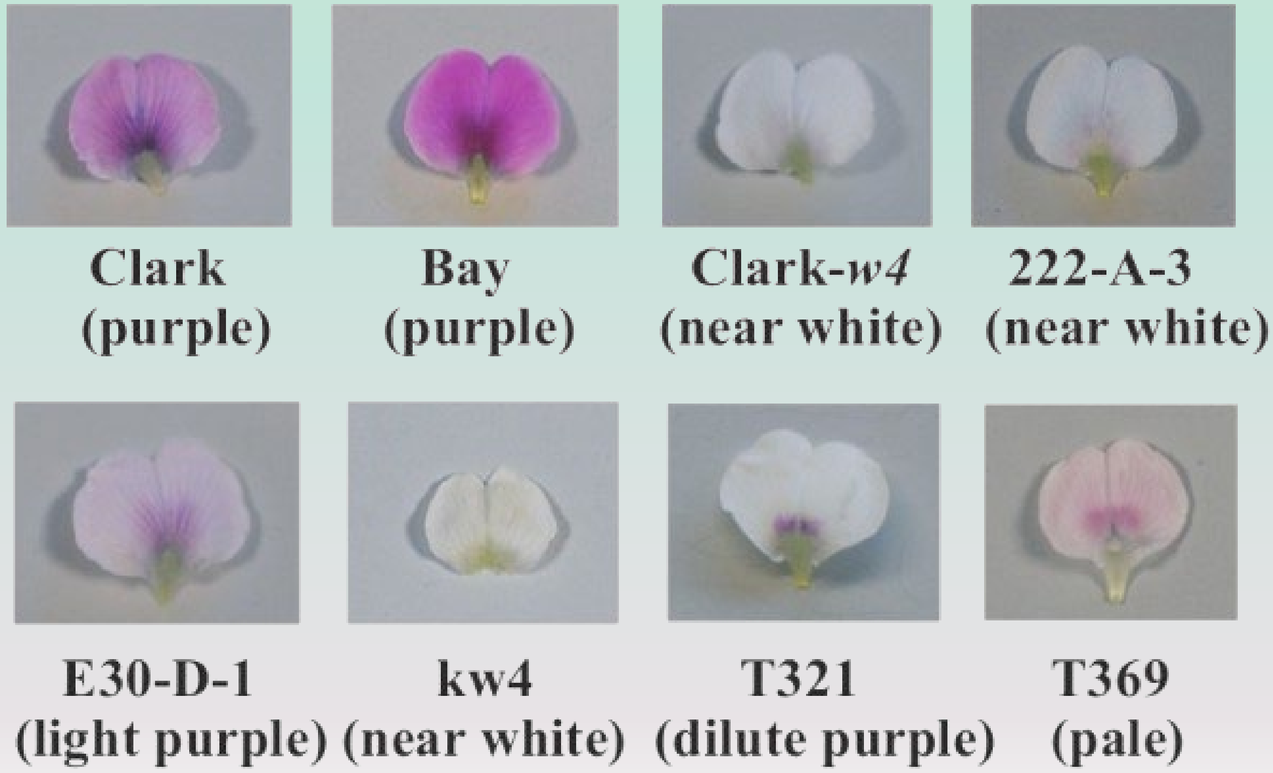
Flower color

- Varies from white to purple



Yan F, Di S, Rojas Rodas F, Rodriguez Torrico T, Murai Y, Iwashina T, Anai T, Takahashi R. Allelic variation of soybean flower color gene W4 encoding dihydroflavonol 4-reductase 2. BMC Plant Biol. 2014 Mar 6;14:58. doi: 10.1186/1471-2229-14-58. PMID: 24602314; PMCID: PMC4015899. (pubmed.ncbi.nlm.nih.gov/24602314/)