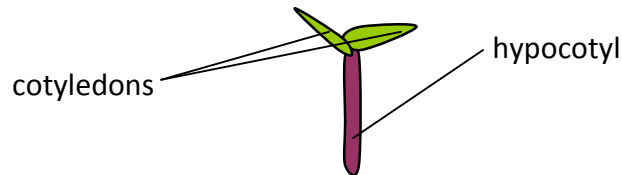


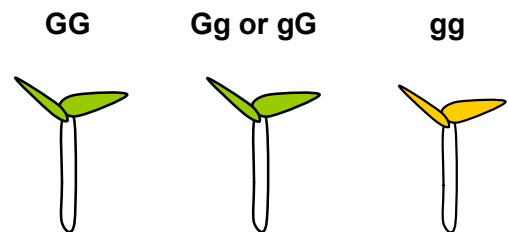
How the seeds are produced

A 'normal' tomato plant would, in its early stages, have a stalk with a purple tinge (hypocotyl) and green seed leaves (cotyledons).



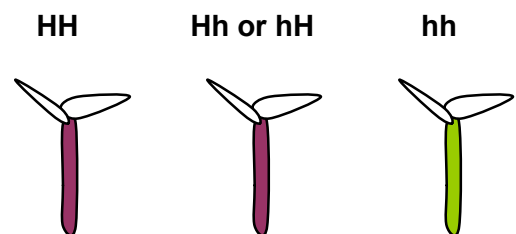
Let's say the cotyledons' colour is governed by the gene 'G'

G (dominant) codes for green cotyledons
g (recessive) codes for golden cotyledons

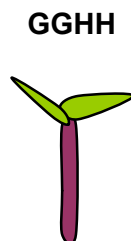


Let's say the hypocotyl colour is governed by the gene 'H'

H (dominant) codes for a purple hypocotyl
h (recessive) codes for a (light green) hypocotyl with no purple in it



So a 'normal' pure breeding seed is

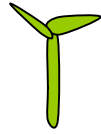


The seeds in an **Eu-Sol Tomato Seeds** pack are bred from naturally occurring mutants.

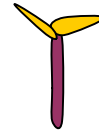
The first mutant has a recessive trait where its hypocotyl is light green and has no purple in it at all. Its cotyledons are also green.

The second mutant has a recessive trait where its cotyledons are golden rather than green. Its hypocotyl is purple.

GG hh



gg HH

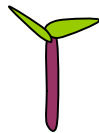


x

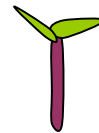
GGhh x ggHH	gH	gH	gH	gH
Gh	GghH	GghH	GghH	GghH
Gh	GghH	GghH	GghH	GghH
Gh	GghH	GghH	GghH	GghH
Gh	GghH	GghH	GghH	GghH

This leads to a seed population entirely formed of seeds with green cotyledons and purple hypocotyls. These seeds were then self-fertilised.

GghH



GghH



x

GghH x GghH	Gh	GH	gh	gH
Gh	GGhh	GGhH	Gghh	GghH
GH	GGhH	GGHH	GgHh	GgHH
gh	gGhh	gGhH	gghh	ggHh
gH	gGHh	gGHH	ggHh	ggHH

This produces the 9:3:3:1 ratio in the seeds in an **Eu-Sol Seed Pack**.

