



Ready Reference Introduced Traits

RR8

Trait	Description and subcategories
	<i>Changed ability of an organism to survive under a range of non-living components of an ecosystem.</i>
Abiotic environmental tolerance	<ul style="list-style-type: none">○ Altered photoperiod sensitivity○ Cold or heat tolerance○ Drought or water tolerance○ Other abiotic environmental tolerance
	<i>Changed ability of an organism grow or reproduce, or changed nutritional composition.</i>
Altered growth, development and product quality	<ul style="list-style-type: none">○ Altered ripening or flowering<ul style="list-style-type: none">▪ Reduced ethylene synthesis (includes increased shelf life or vase life)▪ Reduced pectin degradation (includes expression of antisense polygalacturonase)○ Coloration○ Growth rate or yield○ Nutritional composition (inc. allergenicity)<ul style="list-style-type: none">▪ Altered fatty acids and oils (such as laurate, myristate, oleic acid, linoleic acid)<ul style="list-style-type: none">• Decreased oleic acid oil content• Increased oleic acid oil content▪ Phytate degradation▪ Reduced nicotine content○ Reproductive alteration / Genetic containment<ul style="list-style-type: none">▪ Fertility restoration (includes male fertility restorer)▪ Male fertility restorer▪ Male sterility (includes barnase enzyme expression)○ Other growth, development and product quality



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Chemical tolerance	<p><i>Resistance to a chemical agent, such as a herbicide. For example, some weed control systems involve the use of a crop that is resistant to a particular herbicide and the use of the corresponding non-selective herbicide that will affect all sensitive plants.</i></p> <ul style="list-style-type: none"> ○ Herbicide tolerance <ul style="list-style-type: none"> ▪ Bromoxynil tolerance ▪ Glufosinate tolerance ▪ Glyphosate tolerance ▪ Imidazolinone tolerance ▪ Sethoxydim tolerance ▪ Sulfonylurea tolerance ○ Other chemical tolerance
Medical products	<p><i>Organisms modified for use as medical products, such as animal vaccines or for production of pharmaceuticals.</i></p> <ul style="list-style-type: none"> ○ Animal vaccines ○ Development of transplant organs ○ Production of pharmaceuticals ○ Other medical products
Miscellaneous	<p><i>Modifications that do not fall into any other category, including selectable marker genes, bioremediation and industrial uses.</i></p> <ul style="list-style-type: none"> ○ Production of chemicals or compounds for industrial use ○ Selectable marker genes and reporter genes <ul style="list-style-type: none"> ▪ Antibiotic resistance <ul style="list-style-type: none"> • Aminoglycoside resistance • Ampicillin resistance • Hygromycin resistance • Kanamycin resistance ○ Uptake or degradation of environmental pollutants



Trait	Description and subcategories
Pest resistance	<i>Resistance to an organism such as an insect, fungus, virus or other form of life that causes harm.</i>
	<ul style="list-style-type: none">○ Bacterial resistance○ Fungus resistance○ Insect resistance<ul style="list-style-type: none">▪ Coleoptera resistance▪ Colorado potato beetle resistance▪ Lepidoptera resistance▪ European corn borer resistance▪ Nematode resistance○ Virus resistance<ul style="list-style-type: none">▪ Cucumber mosaic virus resistance▪ Papaya ringspot virus resistance▪ Potato leaf roll virus resistance▪ Potato virus Y resistance▪ Watermelon mosaic virus-2 resistance▪ Zucchini yellow mosaic virus resistance○ Other pest resistance