

Resistance terminology and codes

Definitions of the terms describing the reaction of plants to pests¹

In the information provided by the Seller, the following meaning is given to the terms below:

- 'Susceptibility': the inability of a plant variety to restrict the growth and development of a specified pest.
- 'Resistance': the ability of a plant variety to restrict the growth and development of a specified pest and/or the damage they cause when compared to susceptible plant varieties under similar environmental conditions and pest pressure.

Resistant varieties may exhibit some disease symptoms or damage under heavy pest pressure. Two levels of resistance are defined:

- i. high resistance (HR): plant varieties that highly restrict the growth and development of the specified pest under normal pest pressure when compared to susceptible varieties. These plant varieties may, however, exhibit some symptoms or damage under heavy pest pressure.
- ii. intermediate resistance (IR): plant varieties that restrict the growth and development of the specified pest, but may exhibit a greater range of symptoms or damage compared to high resistant varieties. Intermediate resistant plant varieties will still show less severe symptoms or damage than susceptible plant varieties when grown under similar environmental conditions and/or pest pressure.

It is to be noted that if a resistance is claimed in a plant variety it is limited to the specified biotypes, pathotypes, races or strains of the pest.

If no biotypes, pathotypes, races or strains are specified in the resistance claim for a variety, it is because no generally accepted or relevant classification of the biotypes, pathotypes, races or strains of the cited pest exists. New biotypes, pathotypes, races or strains that may emerge are not covered by the original resistance claim.

- 'Immunity': a plant variety is not subject to attack or infection by a specified pest.
- ¹ FAO defines a pest as: any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products.

Pathogens (microorganisms such as bacteria, viruses and fungi that cause a disease) are, therefore, included in the term 'pest'.

Resistance codes

Resistances in our varieties are coded with a crop-specific resistance code (see the coding list on the next pages for the explanations), unless indicated otherwise. In situations where a variety is resistant to more than one pest, the individual resistance codes will be separated by the symbol '/ '.



		Code	Scientific name	English common name
Asparagus	Fungi	Pa	Puccinia asparagi	Rust
		Bc	Botrytis cinerea	Botrytis blight
		Sv	Stemphylium vesicarium	Purple spot
Beetroot	Virus	BNYVV	Beet necrotic yellow vein virus	Rhizomania
Brassica	Bacteria	Xcc	Xanthomonas campestris pv. campestris	Black rot
	Fungi	Ac	Albugo candida	White rust
		Foc	Fusarium oxysporum f. sp. conglutinans	Fusarium yellows
		Hb (ex Pp/Hp)	Hyaloperonospora brassicae (ex Peronospora / Hyaloperonospora parasitica)	Downy mildew
		Mb	Mycosphaerella brassicicola	Ring spot
		Pb	Plasmodiophora brassicae	Clubroot
		Vd	Verticillium dahliae	Verticillium wilt
		VI	Verticillium longisporum	Verticillium wilt
	Insect	Tt	Thrips tabaci	Thrips
Carrot	Fungi	Ad	Alternaria dauci	Alternaria leaf blight
		Ar	Alternaria radicina	Black rot
		Cc	Cercospora carotae	Cercospora leaf blight
		Eh	Erysiphe heraclei	Powdery mildew
		Ма	Mycocentrospora acerina	Liquorice rot
		Ps	Pythium sulcatum	Cavity spot
		Pv	Pythium violae	Cavity spot
Celery, Celeriac	Fungi	Foa	Fusarium oxysporum f. sp. apii	Fusarium yellows and wilt
		Sa	Septoria apiicola	Late blight
	Virus	CeMV	Celery mosaic virus	Celery mosaic
Cucumber	Viruses	CMV	Cucumber mosaic virus	Cucumber mosaic
		CVYV	Cucumber vein yellowing virus	Cucumber vein yellowing
	Fungi	Ccu	Cladosporium cucumerinum	Scab and gummosis
		Cca	Corynespora cassiicola	Corynespora blight and target spot
		Gc	Golovinomyces cichorarearum	Powdery mildew
		Pcu	Pseudoperonospora cubensis	Downy mildew
		Px	Podosphaera xanthii	Powdery mildew
Leek, (Bunching) Onion, Shallot	Fungi	Ар	Alternaria porri	Purple blotch
		Foc	Fusarium oxysporum f. sp. cepae	Basal rot
		Pd	Peronospora destructor	Downy mildew
		Рр	Phytophthora porri	White tip of leek
		Pa	Puccinia allii	Rust
		Pt	Pyrenochaeta terrestris	Pink root
	Insects	Tt	Thrips tabaci	Thrips
(Rooted) Parsley	Fungus	Pc	Plasmopara crustosa	Downy mildew
Radish	Fungi	For	Fusarium oxysporum f. sp. raphani	Yellows
		Hb	Hyaloperonospora brassicae	Downy mildew
Tomato	Viruses	TMV	Tobacco mosaic virus	Tobacco mosaic
		ToMV	Tomato mosaic virus	Tomato mosaic
		TSWV	Tomato spotted wilt virus	Tomato spotted wilt
	Fungi	Ff (now Pf)	Fulvia fulva (now Passalora fulva)	Leaf mold
		Fol	Fusarium oxysporum f. sp. lycopersici	Fusarium wilt
		Va	Verticillium albo-atrum and/or Verticillium dahliae	Verticillium wilt
	Nematodes	Ма	Meloidogyne arenaria	Root-knot-nematode
		Mi	Meloidogyne incognita	Root-knot-nematode
		Mj	Meloidogyne javanica	Root-knot-nematode