

1: Alphabetical list of disease code acronyms used on the website

(Ref; Johnny's Selected Seed)

Note: HR = High Resistance IR = Intermediate Resistance

- **A** | Anthracnose | Fungus
 - *Colletotrichum lindemuthianum* (Bean)
 - *C. orbiculare* (Cucurbitaceae)
- **AB** | Alternaria Blight | Fungus | *Alternaria dauci* (Carrot) [See **EB** for Alternaria Blight of Tomato]
- **ALS** | Angular Leaf Spot | Bacterium | *Pseudomonas syringae* pv. *lachrymans* (Cucumber)
- **AS** | Alternaria Stem Canker | Fungus | *Alternaria alternata* f. sp. *lycopersici* (Tomato)
- **B** | Bacterial Wilt | Bacterium | *Erwinia tracheiphila* (Cucumber)
- **BB** | Bacterial Blight | Bacterium | *Xanthomonas hortorum* pv. *carotae* (Carrot)
- **BBS** | Bacterial Brown Spot | Bacterium | *Pseudomonas syringae* pv. *syringae* (Bean)
- **BLS** | Bacterial Leaf Spot | *Xanthomonas campestris* pv. *vesicatoria* (Pepper)
- **BMV** | Bean Mosaic Virus (Bean)
- **BO** | Botrytis Blight or Rot of Onion | Fungus | *Botrytis allii* (Onion)
- **BR** | Black Rot | Bacterium | *Xanthomonas campestris* pv. *campestris* (Brassicaceae)
- **BS** | Black Speck | Fungus | *Rhizoctonia* spp
- **C** | Cercospora Blight | Fungus | *Cercospora carotae* (Carrot)
- **CMV** | Cucumber Mosaic Virus (Cucurbitaceae)
- **CR** | Club Root | Fungus | *Plasmodiophora brassicae* (Cabbage)
- **CRR** | Corky Root Rot | Fungus | *Pyrenochaeta lycopersici* (Tomato)
- **CS** | Cavity Spot | Water Mold | *Pythium* spp. (Carrot)
- **CTM** | Curly Top Beet Mosaic Virus (Beet)
- **Cv** | Cladosporium Leaf Spot | Fungus | *Cladosporium variabile* (Spinach)
- **CVYV** | Cucumber Vein Yellowing Virus (Cucumber)
- **DM** | Downy Mildew | Water Mold
 - *Bremia lactucae* (Lettuce)
 - *Hyaloperonospora parasitica* (Arugula)
 - *H. brassicae* (Broccoli, Cabbage, Chinese Cabbage)
 - *Peronospora belbahrii* (Basil)
 - *P. destructor* (Onion)
 - *P. effusa* (Spinach)
 - *P. viciae* (Pea)
 - *Pseudoperonospora cubensis* (Cucumber)
- **EB** | Early Blight (Alternaria Blight) | Fungus | *Alternaria solani* (Tomato)
- **F** | Fusarium Wilt | Fungus
 - *F. oxysporum* f. sp. *basilici* (Basil)

- *Fusarium oxysporum* f. sp. *lycopersici* (Tomato)
- *F. oxysporum* f. sp. *melonis* (Melon)
- *F. oxysporum* f. sp. *niveum* (Watermelon)
- *F. oxysporum* f. sp. *pisi* (Pea)
- **FBR** | Fusarium Basal Rot | Fungus | *Fusarium oxysporum* f. sp. *cepae* (Onion)
- **FLB** | Foliar Late Blight | Water Mold | *Phytophthora infestans* (Potato)
- **FOR** | Fusarium Crown and Root Rot | Fungus | *Fusarium oxysporum* f. sp. *radicis-lycopersici* (Tomato)
- **FY** | Fusarium Yellows | Fungus | *Fusarium oxysporum* f. sp. *conglutinans* (Brassicaceae)
- **GLS** | Gray Leaf Spot | Fungus | *Stemphylium solani* (Tomato)
- **HB** | Halo Blight | Bacterium | *Pseudomonas savastanoi* pv. *phaseolicola* (Bean)
- **LB** | Late Blight | Water Mold | *Phytophthora infestans* (Tomato)
- **LM** | Leaf Mold | Fungus | *Cladosporium fulvum* aka *Fulvia fulva* (Tomato)
- **LMV** | Lettuce Mosaic Virus (Lettuce)
- **MDMV** | Maize Dwarf Mosaic Virus (Corn)
- **MT0-10** | Indicates seeds have been tested for Lettuce Mosaic Virus, and that none was found in a sample of 10,000 seeds or more.
- **MT0-30** | Indicates seeds have been tested for Lettuce Mosaic Virus, and that none was found in a sample of 30,000 seeds or more.
- **N** | Roundworm | Nematode | *Meloidogyne arenaria*, *M. incognita*, *M. javanica* (Tomato)
- **NCLB** | Northern Corn Leaf Blight | Fungus | *Exserohilum turcicum* (Corn)
- **Nr** | Lettuce Leaf Aphid | Insect | *Nasonovia ribisnigri* (Lettuce)
- **Pb** | Lettuce Root Aphid | Insect | *Pemphigus bursarius* (Lettuce)
- **PC** | Phytophthora Blight | Water Mold | *Phytophthora capsici* (Pepper)
- **PEMV** | Pea Enation Mosaic Virus (Pea)
- **PLR** | Pea Leaf Roll Virus (Pea)
- **PM** | Powdery Mildew | Fungus
 - *Erysiphe heraclei* or *Leveillula taurica* (Carrot)
 - *Erysiphe pisi* (Peas)
 - *E. polygoni* (Beans)
 - *Oidium neolycopersici* (Tomato)
 - *Podosphaera xanthii* (Cucurbitaceae)
- **PMV** | Pepper Mottle Virus | *Potyvirus* (Pepper)
- **PR** | Pink Root | Fungus | *Phoma terrestris* (Onion)
- **PRSV** | Papaya Ringspot Virus (Curcubitaceae)
- **PU** | Purple Blotch | Fungus | *Alternaria porri* (Leek)
- **PVY** | Potato Virus Y (Pepper)
- **R** | Common Rust | Fungus
 - *Puccinia allii* (Leek)
 - *P. asparagi* (Asparagus)
 - *P. sorghi* (Corn)
 - *Uromyces appendiculatus* (Bean)
- **Rs** | Corky Root | Bacterium | *Rhizomonas suberifaciens* (Lettuce)

- **RZ** | Rhizoctonia or Black Scurf | Fungus | *Rhizoctonia solani* (Potato)
- **S** | Scab |
 - Bacteria | *Streptomyces scabies* and other *S. ssp.* (Potato)
 - Fungus | *Cladosporium cucumerinum* (Cucumber)
- **SCLB** | Southern Corn Leaf Blight | Fungus | *Bipolaris maydis* (Corn)
- **SW** | Stewart's Wilt | Bacterium | *Pantoea stewartii* (Corn)
- **TBSV** | Tomato Bushy Stunt Virus (Lettuce Dieback Complex [Lettuce])
- **TEV** | Tobacco Etch Virus (Pepper)
- **TLB** | Tuber Late Blight | *Phytophthora infestans* (Potato)
- **TM** | Tobamovirus (Pepper)
- **TMV** | Tobacco Mosaic Virus (Solanaceae)
- **ToANV** | Tomato Apex Necrosis Virus (Tomato)
- **ToMV** | Tomato Mosaic Virus (Tomato)
- **TSP** | Target Spot | Fungus | *Corynespora cassiicola* (Cucumber)
- **TSWV** | Tomato Spotted Wilt Virus (Tomato)
- **TYLCV** | Tomato Yellow Leaf Curl Virus (Tomato)
- **V** | Verticillium Wilt | Fungal | *Verticillium albo-atrum* and other *V. spp.* (Potato, Tomato)
- **WMV** | Watermelon Mosaic Virus (Cucurbitaceae)
- **WR** | White Rust | Water Mold
 - *Albugo occidentalis* (Spinach)
 - *A spp.* (Cabbage)
- **WT** | White Tip | *Phytophthora porri* (Spinach)
- **ZYMV** | Zucchini Yellow Mosaic Virus (Cucurbitaceae)

2: CODES BY CROP TYPE

Recommended Codes for Pest Organisms in Vegetable Crops (version July 2014)

Based on: Recommended Codes for Pest Organisms in Cereal and Vegetable Crops (January 2014); Adopted by the Working Group established by the ISF Vegetable & Ornamental and Cereal Crops Sections

Official ISF-Code | *Scientific name* | Common name

Cabbage, Broccoli, Cauliflower, Kohlrabi (Brassicas)

Ac *Albugo candida* White rust

Foc *Fusarium oxysporum f.sp. conglutinans* Fusarium yellows

Mb *Mycosphaerella brassicicola* Ring spot

Xcc *Xanthomonas campestris pv. campestris* Black rot

Cucumber and Gherkin (Cucumis sativus)

CMV *Cucumber mosaic virus* Cucumber mosaic

CVYV *Cucumber vein yellowing virus* Cucumber vein yellowing

CGMMV *Cucumber green mottle mosaic virus* Cucumber green mottle

CYSDV *Cucurbit yellow stunting disorder virus* Cucurbit yellow stunting disorder

Pcu *Pseudoperonospora cubensis* Downy mildew

PRSV *Papaya ringspot virus* Papaya ringspot

WMV *Watermelon mosaic virus* Watermelon mosaic

ZYMV *Zucchini yellow mosaic virus* Zucchini yellows

Ccu *Cladosporium cucumerinum* Scab and gummosis

Cca *Corynespora cassiicola* Corynespora blight and targetspot

Px (ex Sf) *Podosphaera xanthii (ex Sphaerotheca fuliginea)* Powdery mildew

Co *Colletotrichum orbiculare* Anthracnose

Lettuce (*Lactuca sativa*)

LMV *Lettuce mosaic virus* Lettuce mosaic

BI *Bremia lactucae* Downy mildew

Fol *Fusarium oxysporum f. sp. Lactucae* Fusarium wilt

Me *Macrosiphum euphorbiae* Potato aphid

Ss (Rs) *Sphingomonas suberifaciens* (ex *Rhizomonas suberifaciens*) Corky root

Nr *Nasonovia ribisnigri* Lettuce leaf aphid

Pb *Pemphigus bursarius* Lettuce root aphid

Melon (*Cucumis melo*)

MNSV *Melon necrotic spot virus* Melon necrotic spot

Gc (ex Ec) *Golovinomyces cichoracearum* (ex *Erysiphe cichoracearum*) Powdery mildew

Fom *Fusarium oxysporum f.sp. melonis* Fusarium wilt

Px (ex Sf) *Podosphaera xanthii* (ex *Sphaerotheca fuliginea*) Powdery mildew

Ag *Aphis gossypii* Cotton aphid

Spinach (*Spinacia oleracea*)

CMV *Cucumber mosaic virus* Cucumber mosaic

Pfs *Peronospora farinosa f.sp. spinaciae* Downy mildew

Pepper and Capsicum Rootstock (Capsicum annuum)

PMMoV *Pepper mild mottle virus* * Pepper mild mottle

PVY *Potato Y virus* Potato Y

TMV *Tobacco mosaic virus* * Tobacco mosaic

ToMV *Tomato mosaic virus* * Tomato mosaic

TSWV *Tomato spotted wilt virus* Tomato spotted wilt

CMV *Cucumber mosaic virus* Cucumber mosaic

Ma *Meloidogyne arenaria* Root-knot

Mi *Meloidogyne incognita* Root-knot

Mj *Meloidogyne javanica* Root-knot

Pc *Phytophthora capsici* Buckeye fruit and root rot

Xcv *Xanthomonas campestris* pv. *vesicatoria* Bacterial spot

Lt *Leveillula taurica* (anamorph: *Oidiopsis sicula*) Powdery mildew

* PLEASE NOTICE

TMV/ToMV Deviant RZ-Code **Tm:0**

TMV/ToMV/PMMoV:2 Deviant RZ-Code **Tm:0-2**

TMV/ToMV/PMMoV:2,3 Deviant RZ-Code **Tm:0-3**

Tomato and Tomato Rootstock (*Lycopersicon esculentum* (now *Solanum lycopersicum*) and *S. lycopersicum* x *S. habrochaites*)

TSWV *Tomato spotted wilt virus* Tomato spotted wilt

ToMV *Tomato mosaic virus* Tomato mosaic

TYLCV *Tomato yellow leaf curl virus* Tomato yellow leaf curl

Ff (ex Cf) *Fulvia fulva* (ex *Cladosporium fulvum*) Leaf mold

Fol *Fusarium oxysporum f.sp. lycopersici* Fusarium wilt

For *Fusarium oxysporum f.sp. radicle-lycopersici* Fusarium crown and root rot

On (ex Ol) *Oidium neolyopersici* (ex *Oidium lycopersicum*) Powdery mildew

Lt *Leveillula taurica* (anamorph: *Oidiopsis sicula*) Powdery mildew

PI *Pyrenochaeta lycopersici* Corky root rot

Vd *Verticillium dahliae* Verticillium wilt

Sbl *Stemphylium botryosum f.sp. lycopersici* Gray leaf spot

Va *Verticillium albo-atrum* Verticillium wilt

Ma *Meloidogyne arenaria* Root-knot

Mj *Meloidogyne javanica* Root-knot

Mi *Meloidogyne incognita* Root-knot

Dwarf and climbing French bean (*Phaeseolus vulgaris*)

BCMV *Bean common mosaic virus* Bean common mosaic

CI *Colletotrichum lindemuthianum* Anthraconose

Rootstock Cucurbitaceae (*C. Maxima* x *C. Mochata*, *C. Mochata*, *Lagenaria siceraria*)

Foc *Fusarium oxysporum* f. sp. *cucumerinum* Fusarium wilt

Fom *Fusarium oxysporum* f. sp. *melonis* Fusarium wilt

Fon *Fusarium oxysporum* f. sp. *Niveum* Fusarium wilt

Mi *Meloidogyne incognita* Root-knot

Va *Verticillium albo-atrum* Verticillium wilt

Px (ex Sf) *Podosphaera xanthii* Powdery mildew

Rootstock aubergine (*Solanum torvum*)

Me *Meloidogyne mayaguensis* (Syn. *M. enterolobii*) Root-knot

Mi *Meloidogyne incognita* Root-knot

Vd *Verticillium dahliae* Verticillium wilt