

Common names of sugarcane diseases and their causal agent(s)

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Alternaria leaf spot	<i>Alternaria alternata</i>
Apex rot	unknown
Arrow rot	<i>Fusarium</i> spp.
Australian basal stem, root and sheath rot	unidentified fungus (basidiomycete)
Bacterial mottle	<i>Pectobacterium chrysanthemi</i>
Bacterial sun spot	<i>Pseudomonas</i> sp.
Baker's leaf spot	<i>Bakeropoma sacchari</i>
Banded sclerotial disease	<i>Thanatephorus sasakii</i> , <i>T. cucumeris</i>
Basal stem, root and sheath rot (see also Australian basal stem, root and sheath rot; Marasmius basal stem, root and sheath rot; root and basal stem rot)	<i>Armillaria</i> sp., <i>Dictyophora</i> sp., <i>Mycelia sterilia</i> , <i>Olpidium</i> sp., <i>Rhizoctonia</i> sp.
Black leaf spot (tar spot)	<i>Phyllachora sacchari</i>
Black rot	<i>Ceratocystis adiposa</i>
Black spot	<i>Cercospora acerosum</i>
Black stem rot	<i>Selenophoma</i> sp.
Black stripe	<i>Pseudocercospora atrofiliformis</i>

Brown rot	<i>Corticium</i> sp.
Brown spot	<i>Cercospora longipes</i>
Brown stripe	<i>Bipolaris stenospila</i>
Chlorotic streak	unknown
Collar rot	<i>Hendersonia sacchari</i>
Common rust	<i>Puccinia melanocephala</i>
Covered smut	<i>Sphacelotheca macrospora</i>
Culm and midrib rot	<i>Papularia vinoso</i>
Culmicolous smut (smut)	<i>Ustilago scitaminea</i>
Diplodia rot	<i>Diplodia</i> sp.
Downy mildew	<i>Peronosclerospora sacchari</i> , <i>P. philippinensis</i> , <i>P. spontanea</i>
Dry rot	<i>Physalospora rhodina</i>
Dry top rot	<i>Ligniera vasculorum</i>
Dwarf	unknown
Ergot	<i>Claviceps purpurea</i> , <i>C. pusilla</i>
Eye spot	<i>Bipolaris sacchari</i>
False floral smut	<i>Claviceps</i> sp.
False red stripe	<i>Xanthomonas</i> sp.
Fiji disease	<i>Fiji disease virus</i> (FDV)
Floral smut(s)	<i>Sporisorium cruentum</i> , <i>Sphacelotheca erianthi</i> , <i>Sporisorium schweinfurthianum</i>
Fusarium sett or stem rot	<i>Gibberella fujikuroi</i> , <i>Fusarium tricinctum</i>
Grassy shoot	a phytoplasma
Green grassy shoot	a phytoplasma
Gumming	<i>Xanthomonas axonopodis</i> pv. <i>vasculorum</i>
Helminthosporium leaf spot(s)	<i>Helminthosporium purpurascens</i> , <i>H. portoricensis</i> , <i>Setosphaeria rostrata</i> , <i>Drechslera tetramera</i>
Iliau	<i>Clypeoporthe iliau</i>
Inflorescence binding	<i>Ephelis pallida</i>
Knife-cut (see pokkah boeng)	<i>Gibberella fujikuroi</i> , <i>G. subglutinans</i>
Leaf blast	<i>Didymosphaeria taiwanensis</i>

Leaf blight	<i>Leptosphaeria taiwanensis</i>
Leaf galls (pseudo-Fiji)	unknown
Leaf scald	<i>Xanthomonas albilineans</i>
Leaf scorch	<i>Stagonospora sacchari, Leptosphaeria bicolor</i>
Leaf sooty mould (sooty mould)	<i>Capnodium</i> sp., <i>Fumago sacchari</i>
Leaf splitting	<i>Perenosclerospora miscanthi, P. northii,</i> <i>Perenosclerospora</i> sp., <i>Mycosphaerella striatiformans</i>
Leaf spots	<i>Apiospora camptospora, Cochliobolus lunatus, Diplodia</i> sp., <i>Glomerella tucumanensis, Magnaporthe grisea, Pyrenopeziza indica</i>
Marasmius basal stem, root and sheath rot	<i>Marasmius sacchari, M. stenospilus</i>
Marasmius sheath rot and shoot blight; root rot	<i>Marasmius stenospilus, M. sacchari</i>
Midrib blotch	unknown
Mild mosaic	<i>Sugarcane mild mosaic virus</i> (SCMMV)
Mosaic	<i>Sugarcane mosaic virus</i> (SCMV), <i>Sorghum mosaic virus</i> (SrMV)
Mottled stripe	<i>Herbaspirillum rubrisubalbicans</i>
Myriogenospora leaf binding	<i>Myriogenospora aciculispore</i>
Orange rust	<i>Puccinia kuehnii</i>
Pachymetra root rot	<i>Pachymetra chaunorhiza</i>
Periconia leaf spot	<i>Periconia sacchari</i>
Pestalotia leaf spot	<i>Pestalotia fuscescens</i> var. <i>sacchari</i>
Phyllosticta leaf spot	<i>Phyllosticta hawaiiensis, Phyllosticta</i> sp.
Phytophthora rot of cuttings (= Phytophthora seed piece rot)	<i>Phytophthora</i> spp., <i>P. megasperma</i>
Phytophthora seed piece rot (= Phytophthora rot of cuttings)	<i>Phytophthora</i> spp., <i>P. megasperma</i>
Pineapple disease	<i>Ceratocystis paradoxa</i>
Pokkah boeng (including knife-cut symptoms)	<i>Gibberella fujikuroi, G. subglutinans</i>
Powdery mildew	<i>Erysiphe graminis</i>

Pseudo-Fiji (leaf galls)	unknown
Purple spot (red leaf spot)	<i>Dimeriella sacchari</i>
Pythium root rot	<i>Pythium arrhenomanes</i> , <i>Pythium</i> spp.
Ramu orange leaf	unidentified fungus (exobasidiale)
Ramu scorch	unknown
Ramu streak	unknown
Ramu stunt	a phytoplasma (tentative)
Ratoon stunting or ratoon stunting disease (RSD)	<i>Clavibacter xyli</i> subsp. <i>xyli</i>
Red leaf mottle	<i>Peanut clump virus</i> (PCV)
Red leaf spot (purple spot)	<i>Dimeriella sacchari</i>
Red line	<i>Fusarium</i> sp.
Red rot	<i>Glomerella tucumanensis</i>
Red rot of the leaf sheath	<i>Corticium rolfsii</i>
Red spot of the leaf sheath	<i>Mycovellosiella vaginæ</i>
Red streak	<i>Pseudomonas syringae</i> pv. <i>syringae</i>
Red stripe (top rot)	<i>Acidovorax avenae</i> subsp. <i>avenae</i>
Rhizoctonia sheath and shoot rot	<i>Rhizoctonia solani</i>
Rind disease and sour rot	<i>Phaeocystostroma sacchari</i>
Ring mosaic	unknown
Ring spot	<i>Leptosphaeria sacchari</i>
Root and basal stem rot	<i>Xylaria</i> cf. <i>warburgii</i> , <i>X. arbuscula</i>
Root rots (see also Pachymetra root rot; Pythium root rot; Marasmius sheath rot and shoot blight, root rot)	<i>Leucoporus sacchari</i> , <i>Marasmius sacchari</i> , <i>Rhizoctonia</i> spp., unidentified oomycete
Rust (see common rust and orange rust)	<i>Puccinia melanocephala</i> , <i>P. kuehnii</i>
Schizophyllum rot	<i>Schizophyllum commune</i>
Sclerophthora disease	<i>Sclerophthora macrospora</i>
Sclerotium disease	<i>Sclerotium</i> sp.
Seedling foliage blights	<i>Alternaria alternata</i> , <i>Cochliobolus hawaiiensis</i> , <i>Cochliobolus lunatus</i> , <i>Curvularia senegalensis</i> , <i>Bipolaris sacchari</i> , <i>Setosphaeria rostrata</i>

Sembur	unknown
Sereh	unknown
Sheath rot	<i>Cytospora sacchari</i>
Smut (culmicolous smut)	<i>Ustilago scitaminea</i>
Smuts (see covered smut, culmicolous smut, floral smut, false floral smut)	<i>Sphacelotheca macrospora</i> , <i>Ustilago scitaminea</i> , <i>Sporisorium cruentum</i> , <i>Sphacelotheca erianthi</i> , <i>Sporisorium schweinfurthianum</i> , <i>Claviceps</i> sp.
Sooty mould (leaf sooty mould)	<i>Capnodium</i> sp., <i>Fumago sacchari</i>
Spike	unknown
Spindle rot	related to <i>Acidovorax avenae</i> subsp. <i>avenae</i>
Stellate crystal fungus	<i>Himanthia stellifera</i>
Stinking rot	<i>Pseudomonas desaiana</i>
Streak	<i>Sugarcane streak virus</i> (SSV), <i>Sugarcane streak Egypt virus</i> (SSEV), <i>Sugarcane streak Mauritius virus</i> (SSMV)
Striate mosaic	Sugarcane striate mosaic associated virus (ScSMaV)
Sugarcane bacilliform virus	<i>Sugarcane bacilliform virus</i> (SCBV)
Sugarcane streak mosaic virus	<i>Sugarcane streak mosaic virus</i> (SCSMV)
Target blotch	<i>Helminthosporium</i> sp.
Tar spot (black leaf spot)	<i>Phyllachora sacchari</i>
Top rot (red stripe)	<i>Acidovorax avenae</i> subsp. <i>avenae</i>
Veneer blotch	<i>Deightoniella papuana</i>
White leaf	a phytoplasma
White rash (white speck)	<i>Elsinoe sacchari</i>
White speck (white rash)	<i>Elsinoe sacchari</i>
Wilt	<i>Fusarium sacchari</i> , <i>Acremonium implicatum</i> , <i>A. furcatum</i>
Yellow leaf syndrome	<i>Sugarcane yellow leaf virus</i> (ScYLV), Sugarcane yellows phytoplasma (ScYP)
Yellow spot	<i>Mycovellosiella koepkei</i>
Zonate foot rot	<i>Fomes</i> sp.
Zonate leaf spot	<i>Gloeocercospora sorghi</i>

Suggested literature

BAUDIN P., FLORES S., MATSUOKA S., RICAUD C., 1982. Official multilingual list of names of sugarcane diseases. Sugarcane Pathologists' Newsletter 29: 71–88.

ISSCT STANDING COMMITTEE ON SUGARCANE DISEASES, 1989. Sugarcane diseases and their world distribution. In: Diseases of Sugarcane. Major Diseases. C. Ricaud, B.T. Egan, A.G. Gillaspie Jr and C.G. Hughes (Eds), p. 341–376. Amsterdam, The Netherlands, Elsevier Science Publishers B.V.

RICAUD C., BAILEY R.A., EGAN B.T., GILLASPIE A.G. JR, MATSUOKA S., 1983. Sugarcane diseases and their world distribution. Proceedings International Society Sugar Cane Technologists Congress 18: 27–68.

SIVANESAN A., WALLER J.M., 1986. Sugarcane Diseases. Phytopathological Paper No. 29. Slough UK, CAB International, 88p.