

Supplement: Table S1. Facts about fungal diseases and molds as potential risk for *Cannabis sativa* product quality and safety for human health

Host	Fungus*	Risk or Potential Threat**	Origin
<i>Cannabis sativa</i>	<i>Achyra aquatica</i>	Damping off	India
	<i>Achyra</i> sp.	Damping off	Alabama
	<i>Alternaria alternata</i>	Brown blight, Mold	India
	<i>Alternaria porri</i>	Unknown	France
	<i>Alternaria</i> sp.	Unknown	Manitoba, Iowa
	<i>Alternaria tenuis</i>	Mold	Kyrgyzstan, Illinois, Kansas
	<i>Ascochyta bohemieriae</i>	Leaf blight	China
	<i>Ascochyta prasadii</i>	Leaf blight	China
	<i>Ascochyta</i> sp.	Leaf blight	China
	<i>Aspergillus flavus</i>	Mold, Mycotoxins	Maryland, Virginia, Wisconsin
	<i>Aspergillus niger</i>	Mold, Mycotoxins	Maryland, Wisconsin
	<i>Aspergillus parasiticus</i>	Mold, Mycotoxins	Virginia
	<i>Aspergillus</i> sp.	Mold, Mycotoxins	Iowa
	<i>Botryosphaeria marconii</i>	Hemp blight	France, Italy, Lithuania, Maryland, Russia, Virginia
	<i>Botrytis cinerea</i>	Gray mold	Bulgaria, California, Canada, Oregon, Virginia
	<i>Botrytis</i> sp.	Gray mold	Canada, Manitoba
	<i>Cephalosporium</i> sp.	Leaf strip, wilt	Iowa
	<i>Cercospora cannabina</i>	Olive leaf spot	Cambodia, China, India, Mississippi, Pakistan, Uganda, Russia, Wisconsin
	<i>Cercospora cannabina</i>	Olive leaf spot	China, India, Japan, Missouri
	<i>Cercospora</i> sp.	Olive leaf spot	Cambodia
	<i>Chaetomium succineum</i>	Unknown	India
	<i>Cladosporium tenuissimum</i>	Stem Canker, Mold	India
	<i>Colletotrichum</i> spp.	Anthraxnose	China
	<i>Coniothyrium</i> sp.	Unknown	Iowa
	<i>Curculium solani</i> - (<i>Rhizoctonia solani</i>)	Rot rot, Damping off, Foliar bligh	Greece
	<i>Curularia cymbopogonis</i>	Leaf spot, Blight	Nepal
	<i>Cylindrosporium</i> sp.	Blight	Korea, Maryland
	<i>Dendrophoma marconii</i> (<i>Botryosphaeria marconii</i>)	Twig blight	Chile
	<i>Diaporthe arctii</i> var. <i>achilleae</i>	Stem canker	Italy
	<i>Diaporthe quinze</i>	Stem canker	Illinois, United States
	<i>Didymella arcuata</i>	Leaf Blight	Germany
	<i>Diplodiella ramentacea</i>	Unknown	Poland
	<i>Epiloccum</i> spp.	Black dot	India, Iowa
	<i>Fusarium avenaceum</i> var. <i>herbarum</i>	Stem Canker	Poland
	<i>Fusarium brachyglabosum</i>	Unknown	California
	<i>Fusarium equiseti</i>	Bud rot	California
	<i>Fusarium radicola</i>	unknown	California, Canada, Poland
	<i>Fusarium lateritium</i>	Stem canker	Poland
	<i>Fusarium oxysporum</i>	Wilt, Bud rot, Damping off	California, Canada, China, Poland
	<i>Fusarium oxysporum</i> f. sp. <i>cannabis</i>	Wilt, Bud rot	California, Illinois
	<i>Fusarium solani</i>	Foot rot, Root rot and Bud rot	California, Canada, Poland
	<i>Fusarium</i> sp.	Unknown	Canada, Illinois, Indiana, Iowa, Mexico, Russia, Virginia, Wisconsin
	<i>Fusarium sulphureum</i>	Damping off, Stem canker	Virginia
	<i>Gliomus mossaeae</i>	Root mycorrhiza	Illinois, United States
	<i>Golovinomyces cichoracearum</i>	Powdery Mildew	Canada
	<i>Helicium cannabina</i>	Olive leaf spot	Iowa
	<i>Hormodendrum</i> sp.	Mold	Iowa
	<i>Hymenys cancri</i> - (<i>Nectria cancri</i>)	Foot rot	Maryland
	<i>Leptomyces lacteus</i>	Seed mold	Poland
	<i>Leptosphaeria</i> spp.	Blight	Italy, Romania
	<i>Leptosphaerulina trifolii</i>	Leaf and stem spot	India
	<i>Levellia laurica</i>	Powdery mildew	Asia, France, Turkey, Russia
	<i>Macrophoma</i> sp.	Stem canker, Wilt	Maryland, Virginia
	<i>Macrophoma phaseolina</i>	Charcoal Rot, Damping Off	Illinois, Iran, Spain
	<i>Micropeltopsis cannabina</i>	Unknown	France
	<i>Monilia</i> sp.	Brown rot of fruit	Iowa
	<i>Mucor</i> sp.	Mold	Wisconsin
	<i>Neodysporella cannabina</i> - (<i>Neodysmella cannabina</i>)	Stem canker	China
	<i>Myrothecium roridum</i> - (<i>Paramyrothecium roridum</i>)	Leaf spot	India
	<i>Oidium</i> sp.	Powdery mildew	Italy, South Africa
	<i>Ophiobolus anguiloides</i>	Stem canker	Minnesota
	<i>Oriblia luteola</i>	Unknown	France
	<i>Popularia sphaerosperma</i> - (<i>Arthrinium phaeospermum</i>)	Unknown	India
	<i>Pellicularia rolfsii</i> - (<i>Athelia rolfsii</i>)	Southern blight	Korea
	<i>Penicillium capicicola</i>	Bud rot, Mold	Canada
	<i>Penicillium oleanii</i>	Bud rot, Mold	Canada
	<i>Penicillium</i> sp.	Unknown	Iowa, Wisconsin
	<i>Periconia</i> spp.	Leaf spot	India, Iowa
	<i>Peroconopsis cannabina</i> - (<i>Pseudoperonospora cannabina</i>)	Downy Mildew	Central Asia, China, Lithuania, Pakistan, Poland, Russia
	<i>Phoma cannabina</i> - (<i>Neodysmella cannabina</i>)	Leaf Blight, Stem canker	Asia, Europe, United States
	<i>Phoma herbarum</i>	Leaf Blight, Stem canker	China
	<i>Phoma nebulosa</i> - (<i>Phomatodes nebulosa</i>)	Leaf Blight, Stem canker	Netherlands
<i>Phoma</i> sp.	Leaf Blight, Stem canker	Poland, Iowa	
<i>Phomopsis cannabina</i>	White leaf spot, Stem canker	India, Illinois	
<i>Phomopsis</i> sp.	White leaf spot, Stem canker	Illinois	
<i>Phyllosticta cannabina</i> - (<i>Neodysmella cannabina</i>)	Leaf spot	Bulgaria, China, India, Wisconsin	
<i>Phyllosticta stramineola</i> - (<i>Macrophoma stramineola</i>)	Leaf spot	China, Korea	
<i>Phymatotrichum ansivorum</i> - (<i>Phymatotrichopsis ansivora</i>)	Root rot	Arizona, Texas	
<i>Phymatotrichum</i> sp.	Root rot, Damping off, Foliar bligh	Mexico	
<i>Phytophthora</i> sp.	Root rot	Korea	
<i>Pithomyces chartarum</i> - (<i>Pseudopithomyces chartarum</i>)	Leaf blight	India	
<i>Pleosphaerulina cannabina</i>	Pepper spot	Russia	
<i>Podosphaera macularis</i>	Powdery mildew	Switzerland	
<i>Pseudoperonospora cannabina</i>	Olive leaf spot	China, India, Korea, Poland	
<i>Pseudoperonospora cannabina</i>	Downy mildew	Austria, Bulgaria, China, Europe, France, Hungary, Japan, Korea, Kyrgyzstan, Latvia, Poland, Portugal, Romania, Russia, Spain, Switzerland	
<i>Puccinia cynodontis</i>	Rust	China	
<i>Pythium ophanodermatum</i>	Root Rot, Damping off	California, Canada, Indiana, United States	
<i>Pythium dissotocum</i>	Damping off	Canada	
<i>Pythium myriophyllum</i>	Damping off	Canada	
<i>Pythium ultimum</i> - (<i>Globisporangium ultimum</i>)	Root Rot, Damping off	Canada, Indiana	
<i>Ramularia collo-cygni</i>	Leaf spot	Austria, Europe	
<i>Rhizoctonia</i> sp.	Root Rot	Netherlands	
<i>Schiffneria cannabina</i>	Black Mildew	Nepal	
<i>Sclerotinia sclerotiorum</i>	Hemp Canker, White mold	Canada [Manitoba, Prince Edward Island], China, France, Montana	
<i>Sclerotium bataticola</i> - (<i>Macrophoma phaseolina</i>)	Damping off, Charcoal rot, Collar rot, Stem rot, Root rot	Bulgaria	
<i>Sclerotium rolfsii</i> - (<i>Athelia rolfsii</i>)	Southern blight, Root and steam rot	Italy, South Carolina, Texas	
<i>Septoria cannabina</i> - (<i>Septoria neocannabina</i>)	Yellow leaf spot	Canada, New York, Romania	
<i>Septoria cannabina</i>	Yellow leaf spot	Bulgaria, Canada, China - Florida, Illinois, Iowa, India, Korea, Minnesota, Poland, Romania, Russia, South Dakota, Southeastern states, Taiwan, Texas	
<i>Sphaerotheca macularis</i> - (<i>Podosphaera macularis</i>)	Powdery mildew	Illinois	
<i>Spicaria</i> sp.	Unknown	Iowa	
<i>Stemphylium cannabinum</i>	Leaf Spot, Hemp Canker	Bulgaria	
<i>Thiosphaerulus cucumeris</i> - (<i>Rhizoctonia solani</i>)	Sheath blight, seed and root rot	China	
<i>Trichoderma</i> sp.	Unknown	Iowa	
<i>Trichothecium roseum</i>	Pink rot, Mold	Iowa, Iowa	
<i>Uredo kiriegeriana</i>	Rust	Germany, Russia (USSR)	
<i>Verticillium albo-atrum</i>	Tracheomyces, Wilt	China	

* Citation: Farr, D.F., & Rossman, A.Y. (2001). National Fungus Collection, ARS, USDA. 305 records retrieved on July 7th, 2019, from <https://nrc.ars-grin.gov/fungaldata.html>.
 **Source: An updated list of the Common Names of Plant Diseases by John Michael McPartland 2003. Diseases of Hemp. APS Publications (link: <https://www.apsnet.org/publications/commnames/Pages/Hemp.aspx>) using the Web of Science (data retrieved on July 21, 2019)