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- UAMH 10621 *Leptographium longiclavatum* Date Accessed: 3/30/2006
 Isolation Data: ex sapwood of *Pinus contorta* var. *latifolia* infested with *Dendroctonus ponderosae* Princeton, B. C. S. Lee July 2001
 Sender: Breuil, C. SL-Pw5
 Cross Ref. Nos.: DAOM 234189 = GenBank AY816682 Actin = GenBank AY816689 ITS & LSU = GenBank AY816696 GPD = GenBank AY288935 B-tubulin
 Strain Characters: molecular systematics Distinction from *Leptographium* species and *Ophiostoma clavigerum* (Lee S, Kim JJ, Breuil C, Mycol Res 109:1162-1170, 2005). // Biodiversity Associated with mountain pine beetle in lodgepole pine forests.
- UAMH 10622 *Leptographium longiclavatum* Date Accessed: 3/30/2006
 Isolation Data: ex *Dendroctonus ponderosae* in *Pinus contorta* var. *latifolia* Williams Lake, B. C. S. Lee
 Sender: Breuil, C. SL-W001
 Cross Ref. Nos.: DAOM 234191 = GenBank AY816681 Actin = GenBank AY288936 B-tubulin = GenBank AY816695 GPD = GenBank AY816688 ITS & LSU
 Strain Characters: molecular systematics Distinction from *Leptographium* species and *Ophiostoma clavigerum* (Lee S, Kim JJ, Breuil C, Mycol Res 109:1162-1170, 2005): identification by padlock probes (Tsui CK, Wang B, Khadempour L, Alamouti SM, Bohlmann J, Murray BW, Hamelin RC, J Microbiol Methods. 83(1):26-33, 2010). // Biodiversity Associated with mountain pine beetle in lodgepole pine forests (Lee S, Kim JJ, Breuil C, Mycol Res 109:1162-1170, 2005).
- UAMH 10623 *Leptographium longiclavatum* Date Accessed: 3/30/2006
 Type *Leptographium longiclavatum*
 Isolation Data: ex sapwood of *Pinus contorta* var. *latifolia* infested with *Dendroctonus ponderosae* Kamloops, B. C. S. Lee Nov 2001
 Sender: Breuil, C. SL-Kw1436
 Cross Ref. Nos.: DAOM 234192 (holotype) = GenBank AY816679 Actin = GenBank AY816693 ITS & LSU = GenBank AY288934 B-tubulin = GenBank AY816693 GPD
 Strain Characters: molecular systematics Distinction from *Leptographium* species and *Ophiostoma clavigerum* (Lee S, Kim JJ, Breuil C, Mycol Res 109:1162-1170, 2005): identification by padlock probes (Tsui CK, Wang B, Khadempour L, Alamouti SM, Bohlmann J, Murray BW, Hamelin RC, J Microbiol Methods. 83(1):26-33, 2010). // Biodiversity Associated with mountain pine beetle in lodgepole pine forests (Lee S, Kim JJ, Breuil C, Mycol Res 109:1162-1170, 2005).
- UAMH 10627 *Grosmannia clavigera* Date Accessed: 3/30/2006
 Isolation Data: ex bark *Pinus contorta* var. *latifolia* infested with *Dendroctonus ponderosae* Banff, Alta. S. Lee July 2003
 Sender: Breuil, C. SL-B6
 Strain Characters: molecular systematics Genetic diversity in *Ophiostoma clavigerum* associated with mountain pine beetle.
- UAMH 10628 *Grosmannia clavigera* Date Accessed: 3/30/2006
 Isolation Data: ex bark *Pinus contorta* var. *latifolia* infested with *Dendroctonus ponderosae* Banff, Alta. S. Lee July 2003
 Sender: Breuil, C. SL-B9

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Strain Characters: molecular systematics Genetic diversity in *Ophiostoma clavigerum* associated with mountain pine beetle.

UAMH 10629 *Grosmannia clavigera* Date Accessed: 3/30/2006
 Isolation Data: ex bark *Pinus contorta* var. *latifolia* bark infested with *Dendroctonus ponderosae* Banff, Alta. S. Lee July 2003
 Sender: Breuil, C. SL-B13
 Strain Characters: molecular systematics Genetic diversity in *Ophiostoma clavigerum* associated with mountain pine beetle.

UAMH 10630 *Grosmannia clavigera* Date Accessed: 3/30/2006
 Isolation Data: ex bark *Pinus contorta* var. *latifolia* infested with *Dendroctonus ponderosae* Banff, Alta. S. Lee July 2003
 Sender: Breuil, C. SL-B26
 Strain Characters: molecular systematics Genetic diversity in *Ophiostoma clavigerum* associated with mountain pine beetle.

UAMH 10965 *Grosmannia aurea* Date Accessed: 3/4/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana*; moderate bluestain present Fox Creek, Alta. A. Rice 23-Apr-2007
 Sender: Rice, A. M001-03-03-06-UC03DL06
 Cross Ref. Nos.: GenBank GU370181 beta tubulin = GenBank GU370224 EF1 alpha = GenBank GU370310 UFM = GenBank GU370138 actin = GenBank GU370267 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype AI1 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): spacial community structure of mountain pine beetle fungal symbionts (Roe AD, James PMA, Rice AV, Cooke JEK, Sperling FAH, Microb Ecol 62:347-360, 2011).

UAMH 10966 *Grosmannia aurea* Date Accessed: 3/4/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta* x *banksiana*; from B. Cooke overwintering study(FC-3-1) Fox Creek, Alta. A. Rice 23-Apr-2007
 Sender: Rice, A. M001-03-03-08-UC06G11
 Cross Ref. Nos.: GenBank GU370185 beta tubulin = GenBank GU370228 EF1 alpha = GenBank GU370314 UFM = GenBank GU370142 actin = GenBank GU370271 ITS2
 Strain Characters: molecular systematics ITS genotype haplotype AI2 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Biodiversity mountain pine beetle genomics project.

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- UAMH 10967 *Grosmannia aurea* Date Accessed: 3/4/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; larval size variable, 50-60% larval survival Harvie Heights, Canmore, Alta. A. Rice 15-Feb-2007
 Sender: Rice, A. M001-06-02-10-UC38DL47
 Cross Ref. Nos.: GenBank GU370179 beta tubulin = GenBank GU370222 EF1 alpha = GenBank GU370308 UFM = GenBank GU370136 actin = GenBank GU370265 ITS2
 Strain Characters: molecular systematics ITS genotype haplotype AII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Biodiversity mountain pine beetle genomics project.
- UAMH 10968 *Grosmannia aurea* Date Accessed: 3/4/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana* Lingrell, Grande Prairie, Alta. A. Rice 05-Mar-2008
 Sender: Rice, A. M002-01-03-03-UC12DL18
 Cross Ref. Nos.: GenBank GU370205 beta tubulin = GenBank GU370248 EF1 alpha = GenBank GU370334 UFM = GenBank GU370162 actin = GenBank GU370291 ITS2
 Strain Characters: molecular systematics ITS genotype haplotype AII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Biodiversity mountain pine beetle genomics project.
- UAMH 10969 *Grosmannia aurea* Date Accessed: 3/4/2009
 Isolation Data: ex flame-sterilized wood in mountain pine beetle (*Dendroctonus ponderosae*) gallery in *Pinus contorta* x *banksiana* Valleyview, Fox Creek, Alta. A. Rice 17-Jan-2008
 Sender: Rice, A. M002-03-01-12-UC16G21
 Cross Ref. Nos.: GenBank GU370207 beta tubulin = GenBank GU370250 EF1 alpha = GenBank GU370336 UFM = GenBank GU370164 actin = GenBank GU370293 ITS2
 Strain Characters: molecular systematics ITS genotype haplotype AII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Biodiversity mountain pine beetle genomics project.
- UAMH 10970 *Grosmannia aurea* Date Accessed: 3/4/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta*; moderate bluestain, multiple insect species present Spray Lakes West, Canmore, Alta. A. Rice 26-Sep-2007
 Sender: Rice, A. M002-06-01-08-UL05DL39
 Cross Ref. Nos.: GenBank GU370217 EF1 alpha = GenBank GU370303 UFM = GenBank GU370131 Actin = GenBank GU370260 ITS2 = GenBank GU370174 beta tubulin
 Strain Characters: molecular systematics ITS genotype haplotype AII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Biodiversity mountain pine beetle genomics project.

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- UAMH 11000 *Leptographium terebrantis* Date Accessed: 3/16/2009
 Isolation Data: ex wood of *Pinus contorta* with very small larvae (1-2 instar) of mountain pine beetle (*Dendroctonus ponderosae*) Spray Lake, Canmore, Alta. A. Rice 02-Feb-2007
 Sender: Rice, A. M001-06-01-03-UC48G19
 Cross Ref. Nos.: GenBank GU370186 beta tubulin = GenBank GU370229 EF1 alpha = GenBank GU370315 UFM = GenBank GU370143 actin = GenBank GU370272 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype AI1 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Cellulolytic.
- UAMH 11001 *Leptographium terebrantis* Date Accessed: 3/16/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* with little bluestain Coleman Blairmore area, Crowsnest Pass, Alta. A. Rice 28-Feb-2007
 Sender: Rice, A. M001-07-01-03-UC23DL10
 Cross Ref. Nos.: GenBank GU370206 beta tubulin = GenBank GU370249 EF1 alpha = GenBank GU370335 UFM = GenBank GU370163 actin = GenBank GU370292 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype AI1 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Cellulolytic.
- UAMH 11002 *Leptographium terebrantis* Date Accessed: 3/16/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana* Valleyview, Fox Creek, Alta. A. Rice 17-Jan-2008
 Sender: Rice, A. M002-03-01-12-UC18G23
 Cross Ref. Nos.: GenBank GU370197 beta tubulin = GenBank GU370240 EF1 alpha = GenBank GU370326 UFM = GenBank GU370154 actin = GenBank GU370283 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype TI2 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Cellulolytic.
- UAMH 11003 *Leptographium terebrantis* Date Accessed: 3/16/2009
 Isolation Data: ex adult of mountain pine beetle (*Dendroctonus ponderosae*) in gallery in *Pinus contorta* x *banksiana* Valleyview, Fox Creek, Alta. A. Rice 17-Jan-2008
 Sender: Rice, A. M002-03-01-12-UC67DA09G59
 Cross Ref. Nos.: GenBank GU370198 beta tubulin = GenBank GU370241 EF1 alpha = GenBank GU370327 UFM = GenBank GU370155 actin = GenBank GU370284 ITS2
 Strain Characters: molecular systematics ITS genotype haplotype AI1 (fide A. Roe). // Cellulolytic. // Biodiversity mountain pine beetle genomics project.

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- UAMH 11004 *Leptographium terebrantis* Date Accessed: 3/16/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana* Fox Creek, Alta. A. Rice 22-Jan-08
 Sender: Rice, A. M002-03-01-17-UM03DL25
 Cross Ref. Nos.: GenBank GU370195 beta tubulin = GenBank GU370238 EF1 alpha = GenBank GU370324 UFM = GenBank GU370152 actin = GenBank GU370281 ITS2
 Strain Characters: molecular systematics ITS genotype haplotype TI2 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Cellulolytic. // Biodiversity mountain pine beetle genomics project.
- UAMH 11005 *Leptographium terebrantis* Date Accessed: 3/16/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Harvie Heights, Canmore, Alta. A. Rice 31-Jan-2008
 Sender: Rice, A. M002-06-05-09-UC43DL48
 Cross Ref. Nos.: GenBank GU370199 beta tubulin = GenBank GU370242 EF1 alpha = GenBank GU370328 UFM = GenBank GU370156 actin = GenBank GU370285 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype AI1 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Cellulolytic.
- UAMH 11006 *Leptographium terebrantis* Date Accessed: 3/16/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Oldman, Crowsnest, Alta. A. Rice 06-Feb-08
 Sender: Rice, A. M002-07-02-01-UC08DL08
 Cross Ref. Nos.: GenBank GU370208 beta tubulin = GenBank GU370251 EF1 alpha = GenBank GU370337 UFM = GenBank GU370165 actin = GenBank GU370294 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype AI1 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Cellulolytic.
- UAMH 11007 *Leptographium terebrantis* Date Accessed: 3/16/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta*; Dolichopodidae predators present Mount Wardle, Kootenay-Yoho area, Alta. A. Rice 05-Dec-07
 Sender: Rice, A. M002-16-01-05-UC38DL41
 Cross Ref. Nos.: GenBank GU370209 beta tubulin = GenBank GU370252 EF1 alpha = GenBank GU370338 UFM = GenBank GU370166 actin = GenBank GU370295 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype AI1 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010). // Cellulolytic.

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- UAMH 11013 *Leptographium longiclavatum* Date Accessed: 3/30/2009
 Isolation Data: ex flame sterilized wood in gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana* with minimal to moderate bluestain Fairview, Alta. A. Rice 03-May-2007
 Sender: Rice, A. M001-13-03-02-UL01G01
 Cross Ref. Nos.: GenBank GU370190 beta tubulin = GenBank GU370233 EF1 alpha = GenBank GU370319 UFM = GenBank GU370147 actin = GenBank GU370276 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype LI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, *Mol Ecol Res* 10:946-959, 2010).
- UAMH 11014 *Leptographium longiclavatum* Date Accessed: 3/30/2009
 Isolation Data: ex adult of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana* Fox Creek, Alta. A. Rice 22-Jan-2008
 Sender: Rice, A. M002-03-01-17-UC47DA13G63
 Cross Ref. Nos.: GenBank GU370196 beta tubulin = GenBank GU370239 EF1 alpha = GenBank GU370325 UFM = GenBank GU370153 actin = GenBank GU370282 ITS2
 Strain Characters: molecular systematics ITS genotype haplotype LI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, *Mol Ecol Res* 10:946-959, 2010). // Biodiversity mountain pine beetle genomics project.
- UAMH 11015 *Leptographium longiclavatum* Date Accessed: 3/30/2009
 Isolation Data: ex flame-sterilized wood in galleries of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Nakiska, Canmore, Alta. A. Rice 27-Sep-2007
 Sender: Rice, A. M002-06-02-09-UL02G41
 Cross Ref. Nos.: GenBank GU370189 beta tubulin = GenBank GU370232 EF1 alpha = GenBank GU370318 UFM = GenBank GU370146 actin = GenBank GU370275 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype LI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, *Mol Ecol Res* 10:946-959, 2010).
- UAMH 11016 *Leptographium longiclavatum* Date Accessed: 3/30/2009
 Isolation Data: ex flame-sterilized wood in galleries of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Harvie Heights, Canmore, Alta. A. Rice 01-Feb-08
 Sender: Rice, A. M002-06-05-13-UL01G70
 Cross Ref. Nos.: GenBank GU370191 beta tubulin = GenBank GU370234 EF1 alpha = GenBank GU370320 UFM = GenBank GU370148 actin = GenBank GU370277 ITS2

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Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype LI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010).

- UAMH 11017 *Leptographium longiclavatum* Date Accessed: 3/30/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Harvie Heights, Canmore, Alta. A. Rice 01-Feb-2008
 Sender: Rice, A. M002-06-05-14-UL03DL74
 Cross Ref. Nos.: GenBank GU370193 beta tubulin = GenBank GU370236 EF1 alpha = GenBank GU370322 UFM = GenBank GU370150 actin = GenBank GU370279 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype LI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010).
- UAMH 11018 *Leptographium longiclavatum* Date Accessed: 3/30/2009
 Isolation Data: ex flame-sterilized wood in galleries of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; small larvae, minimal bluestain present Valemout, B.C. A. Rice 18-Oct-2007
 Sender: Rice, A. M002-10-02-09-UL03G43
 Cross Ref. Nos.: GenBank GU370211 beta tubulin = GenBank GU370254 EF1 alpha = GenBank GU370340 UFM = GenBank GU370168 actin = GenBank GU370297 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype LI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010).
- UAMH 11019 *Leptographium longiclavatum* Date Accessed: 3/30/2009
 Isolation Data: ex flame-sterilized wood in galleries of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; moderate bluestain present Muddy/Sheep, Willmore-Kakwa, B.C. A. Rice 27-Mar-2008
 Sender: Rice, A. M002-02-03-03-UL11G19
 Cross Ref. Nos.: GenBank GU370213 beta tubulin = GenBank GU370256 EF1 alpha = GenBank GU370342 UFM = GenBank GU370170 actin = GenBank GU370299 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype LI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010).

UAMH 11020 *Leptographium longiclavatum* Date Accessed: 3/30/2009

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Isolation Data: ex flame-sterilized wood in galleries of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; moderate bluestain present Blaeberry, Golden, B.C. A. Rice 24-Oct-2007
 Sender: Rice, A. M002-11-03-04-UL13G22
 Cross Ref. Nos.: GenBank GU370214 beta tubulin = GenBank GU370257 EF1 alpha = GenBank GU370343 UFM = GenBank GU370171 actin = GenBank GU370300 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype LII (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, *Mol Ecol Res* 10:946-959, 2010).

UAMH 11035 *Ophiostoma montium*

Date Accessed: 6/18/2009

Isolation Data: ex wood near gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*; little blue stain present Resources Road, Grande Prairie, Alta. A. Rice 14-Mar-2007
 Sender: Rice, A. M001-01-01-03-UM07G16
 Cross Ref. Nos.: GenBank HQ413427 Btub = GenBank HQ413503 EF1a = GenBank HQ413351 actin = GenBank HQ413579 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011). // Culture conditions non sporulating on deposit.

UAMH 11036 *Ophiostoma montium*

Date Accessed: 6/18/2009

Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*; some bluestain South West-Wapiti, Grande Prairie, Alta. A. Rice 22-Mar-2007
 Sender: Rice, A. M001-01-03-02-UM05DL10
 Cross Ref. Nos.: GenBank HQ413433 Btub = GenBank HQ413357 actin = GenBank HQ413585 ITS2 = GenBank HQ413509 EF1a
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI5 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

UAMH 11037

Ophiostoma montium Date Accessed: 6/18/2009

Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; lots of bluestain and larvae Willmore-Kakwa, Wilmore, Alta. A. Rice 07-May-2007
 Sender: Rice, A. M001-02-01-01-UM02DL02
 Cross Ref. Nos.: GenBank HQ413435 Btub = GenBank HQ413511 EF1a = GenBank HQ413359 actin = GenBank HQ413587 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI3 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

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- UAMH 11038 *Ophiostoma montium* Date Accessed: 6/18/2009
 Isolation Data: ex wood in gallery of mountain pine beetle (*Dendroctonus ponderosae*) Pinus contorta; lots of bluestain and larvae Willmore-Kakwa, Wilmore, Alta. A. Rice 11-May-2007
 Sender: Rice, A. M001-02-01-07-UM34G38
 Cross Ref. Nos.: GenBank HQ413432 Btub = GenBank HQ413508 EF1a = GenBank HQ413356 actin = GenBank HQ413584 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).
- UAMH 11039 *Ophiostoma montium* Date Accessed: 6/18/2009
 Isolation Data: larvae in gallery of mountain pine beetle (*Dendroctonus ponderosae*) in Pinus contorta; moderate bluestain Willmore-Kakwa, Wilmore, Alta. A. Rice 09-May-2007
 Sender: Rice, A. M001-02-02-08-UM29DL40
 Cross Ref. Nos.: GenBank HQ413452 Btub = GenBank HQ413528 EF1a = GenBank HQ413376 actin = GenBank HQ413604 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI5 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).
- UAMH 11040 *Ophiostoma montium* Date Accessed: 6/18/2009
 Isolation Data: ex wood in gallery of mountain pine beetle (*Dendroctonus ponderosae*) in Pinus contorta; moderate bluestain Willmore-Kakwa, Wilmore, Alta. A. Rice 09-May-2007
 Sender: Rice, A. M001-02-02-10-UM32G44
 Cross Ref. Nos.: GenBank HQ413429 Btub = GenBank HQ413505 EF1a = GenBank HQ413353 actin = GenBank HQ413581 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).
- UAMH 11041 *Ophiostoma montium* Date Accessed: 6/18/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in Pinus contorta; lots of bluestain & larvae Willmore-Kakwa, Wilmore, Alta. A. Rice 10-May-2007
 Sender: Rice, A. M001-02-03-02-UM11DL13
 Cross Ref. Nos.: GenBank HQ413431 Btub = GenBank HQ413507 EF1a = GenBank HQ413355 actin = GenBank HQ413583 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI5 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).
- UAMH 11042 *Ophiostoma montium* Date Accessed: 6/18/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in Pinus contorta; lots of bluestain & larvae Willmore-Kakwa, Wilmore, Alta. A. Rice 10-May-2007
 Sender: Rice, A. M001-02-03-07-UM31DL35

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Cross Ref. Nos.: GenBank HQ413434 Btub = GenBank HQ413510 EF1a = GenBank HQ413358 actin = GenBank HQ413586 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11043 *Ophiostoma montium* Date Accessioned: 6/18/2009
 Isolation Data: ex wood in gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*; moderate bluestain Fairview, Alta. A. Rice 03-May-2007
 Sender: Rice, A. M001-13-03-03-UM04G04
 Cross Ref. Nos.: GenBank HQ413456 Btub = GenBank HQ413532 EF1a = GenBank HQ413380 actin = GenBank HQ413608 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11044 *Ophiostoma montium* Date Accessioned: 6/18/2009
 Isolation Data: ex adult mountain pine beetle (*Dendroctonus ponderosae*) in gallery in *Pinus contorta* Hasler FSR, Tumbler Ridge, Alta. A. Rice. 06-Nov-2007
 Sender: Rice, A. M002-09-01-04-UM42DA15G59
 Cross Ref. Nos.: GenBank HQ413474 Btub = GenBank HQ413550 EF1a = GenBank HQ413398 actin = GenBank HQ413626 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11055 *Ophiostoma montium* Date Accessioned: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, strong bluestain Willmore-Kakwa, Willmore, Alta. A. Rice 10-May-2007
 Sender: Rice, A. M001-02-03-09-UM37G44
 Cross Ref. Nos.: GenBank HQ413491 Btub = GenBank HQ413567 EF1a = GenBank HQ413415 actin = GenBank HQ413643 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI5 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

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- UAMH 11056 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, bluestain variable Fox Creek, Alta. A. Rice 18-Apr-2007
 Sender: Rice, A. M001-03-01-01-UM01G01
 Cross Ref. Nos.: GenBank HQ413442 Btub = GenBank HQ413518 Ef1a = GenBank HQ413366 actin = GenBank HQ413594 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI5 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11057 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana* with strong bluestain Fox Creek, Alta. A. Rice 18-Apr-2007
 Sender: Rice, A. M001-03-01-04-UM11G13
 Cross Ref. Nos.: GenBank HQ413437 Btub = GenBank HQ413514 EF1a = GenBank HQ413362 actin = GenBank HQ413590 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11058 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana*; strong bluestain Fox Creek, Alta. A. Rice 18-Apr-2007
 Sender: Rice, A. M001-03-01-04-UM13DL15
 Cross Ref. Nos.: GenBank HQ413449 Btub = GenBank HQ413525 EF1a = GenBank HQ413373 actin = GenBank HQ413601 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI3 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11059 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, minimal bluestain Fox Creek, Alta. A. Rice 25-Apr-2007
 Sender: Rice, A. M001-03-02-09-UM06G15
 Cross Ref. Nos.: GenBank HQ413443 Btub = GenBank HQ413519 EF1a = GenBank HQ413367 actin = GenBank HQ413595 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11060 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, minimal bluestain Fox Creek, Alta. A. Rice 23-Apr-2007
 Sender: Rice, A. M001-03-03-02-UM01G01

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Cross Ref. Nos.: GenBank HQ413461 Btub = GenBank HQ413537 EF1a = GenBank HQ413385 actin = GenBank HQ413613 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project: comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011). // Molecular systematics ITS genotype haplotype MI3 (fide A. Rice): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11061 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana* Spray Lakes, Canmore, Alta. A. Rice 02-Feb-2007
 Sender: Rice, A. M001-06-01-02-UM09DL15
 Cross Ref. Nos.: GenBank HQ413440 Btub = GenBank HQ413516 EF1a = GenBank HQ413364 actin = GenBank HQ413592 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI7 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11062 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana* Harvey Heights, Canmore, Alta. A. Rice 15-Feb-2007
 Sender: Rice, A. M001-06-02-04-UM08G19
 Cross Ref. Nos.: GenBank HQ413457 Btub = GenBank HQ413533 EF1a = GenBank HQ413381 actin = GenBank HQ413609 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Rice): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11063 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana* Harvie Heights, Canmore, Alta. A. Rice 15-Feb-2007
 Sender: Rice, A. M001-06-02-06-UM22DL27
 Cross Ref. Nos.: GenBank HQ413488 Btub = GenBank HQ413564 EF1a = GenBank HQ413412 actin = GenBank HQ413640 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11064 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana* Canmore, Alta. A. Rice 15-Feb-2007
 Sender: Rice, A. M001-06-02-08-UM25G40
 Cross Ref. Nos.: GenBank HQ413493 Btub = GenBank HQ413569 EF1a = GenBank HQ413417 actin = GenBank HQ413645 ITS2

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Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

UAMH 11065 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, little bluestain Coleman-Blairmore, Crownsnest Past, Alta. A. Rice 01-Mar-2007
 Sender: Rice, A. M001-07-01-09-UM17G25
 Cross Ref. Nos.: GenBank HQ413439 Btub = GenBank HQ413515 EF1a = GenBank HQ413363 actin = GenBank HQ413591 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI3 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011)

UAMH 11066 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana* with bluestain Fairview, Alta. A. Rice 03-Apr-2007
 Sender: Rice, A. M001-13-01-01-UM02DL02
 Cross Ref. Nos.: GenBank HQ413430 Btub = GenBank HQ413506 EF1a = GenBank HQ413354 actin = GenBank HQ413582 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

UAMH 11067 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana* with minimal bluestain present Werslay, Fairview, Alta. A. Rice 01-May-2007
 Sender: Rice, A. M001-13-02-05-UM06DL09
 Cross Ref. Nos.: GenBank HQ413454 Btub = GenBank HQ413530 EF1a = GenBank HQ413378 actin = GenBank HQ413606 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI3 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

UAMH 11068 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, moderate bluestain Werslay, Fairview, Alta. A. Rice 02-May-2007
 Sender: Rice, A. M001-13-02-09-UM14G20
 Cross Ref. Nos.: GenBank HQ413460 Btub = GenBank HQ413536 EF1a = GenBank HQ413384 actin = GenBank HQ413612 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

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- UAMH 11069 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, minimal bluestain Fairview, Alta. A. Rice 03-May-2007
 Sender: Rice, A. M001-13-03-08-UM11G11
 Cross Ref. Nos.: GenBank HQ413478 Btub = GenBank HQ413554 EF1a = GenBank HQ413402 actin = GenBank HQ413630 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI5 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11070 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, minimal bluestain Spray Lakes West, Canmore, Alta. A. Rice 25-Sep-2007
 Sender: Rice, A. M002-06-01-03-UM01G12
 Cross Ref. Nos.: GenBank HQ413497 Btub = GenBank HQ413563 EF1a = GenBank HQ413411 actin = GenBank HQ413639 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11071 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* x *banksiana*, strong bluestain Spray Lakes West, Canmore, Alta. A. Rice 26-Sep-2007
 Sender: Rice, A. M002-06-01-07-UM04G34
 Cross Ref. Nos.: GenBank HQ413445 Btub = GenBank HQ413521 EF1a = GenBank HQ413369 actin = GenBank HQ413597 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11072 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana*; strong bluestain present Murray FSR, Tumbler Ridge, Alta. A. Rice 07-Nov-2007
 Sender: Rice, A. M002-09-02-06-UM40DL34
 Cross Ref. Nos.: GenBank HQ413472 Btub = GenBank HQ413548 EF1a = GenBank HQ413396 actin = GenBank HQ413624 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI3 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11073 *Ophiostoma montium* Date Accessed: 6/24/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana*; *Ips* also present Ladner, Sparwood, Alta. A. Rice 20-Nov-2007
 Sender: Rice, A. M002-12-01-04-UM12DL18

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Cross Ref. Nos.: GenBank HQ413495 Btub = GenBank HQ413571 EF1a = GenBank HQ413419 actin = GenBank HQ413647 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11074 *Ophiostoma montium* Date Accessioned: 6/24/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana*; Cleridae and Staphylinidae present Brule Creek, Sparwood, Alta. A. Rice 12-Apr-2007
 Sender: Rice, A. M002-12-03-05-UM05DL28
 Cross Ref. Nos.: GenBank HQ413484 Btub = GenBank HQ413560 EF1a = GenBank HQ413408 actin = GenBank HQ413636 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11075 *Ophiostoma montium* Date Accessioned: 8/5/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; strong bluestain present Spray Lakes West, Canmore, Alta. A. Rice 26-Sep-2007
 Sender: Rice, A. M002-06-01-07-UM04G34
 Cross Ref. Nos.: GenBank HQ413492 Btub = GenBank HQ413568 EF1a = GenBank HQ413416 actin = GenBank HQ413644 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011)

UAMH 11076 *Ophiostoma montium* Date Accessioned: 8/5/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta*; strong bluestain present Spray Lakes West, Canmore, Alta. A. Rice 26-Sep-2007
 Sender: Rice, A. M002-06-01-07-UM23DL33
 Cross Ref. Nos.: GenBank HQ413425 Btub = GenBank HQ413501 EF1a = GenBank HQ413349 actin = GenBank HQ413577 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11077 *Ophiostoma montium* Date Accessioned: 8/5/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Spray Lakes West, Canmore, Alta. A. Rice 26-Sep-2007
 Sender: Rice, A. M002-06-01-09-UM31G45
 Cross Ref. Nos.: GenBank HQ413490 Btub = GenBank HQ413566 EF1a = GenBank HQ413414 actin = GenBank HQ413642 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI1 (fide A. Roe): comparative phylogeography.

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- UAMH 11078 *Ophiostoma montium* Date Accessed: 8/5/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Nakiska, Canmore, Alta. A. Rice 27-Sep-2007
 Sender: Rice, A. M002-06-02-05-UM08G24
 Cross Ref. Nos.: GenBank HQ413453 Btub = GenBank HQ413529 EF1a = GenBank HQ413377 actin = GenBank HQ413605 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11079 *Ophiostoma montium* Date Accessed: 8/5/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; strong bluestain present Nakiska, Canmore, Alta. A. Rice 27-Sep-2007
 Sender: Rice, A. M002-06-02-02-UM24G15
 Cross Ref. Nos.: GenBank HQ413464 Btub = GenBank HQ413540 EF1a = GenBank HQ413388 actin = GenBank HQ413616 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI8 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11080 *Ophiostoma montium* Date Accessed: 8/5/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Nakiska, Canmore, Alta. A. Rice 27-Sep-2007
 Sender: Rice, A. M002-06-02-09-UM33DL38
 Cross Ref. Nos.: GenBank HQ413441 Btub = GenBank HQ413593 ITS2 = GenBank HQ413517 EF1a = GenBank HQ413365 actin
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11081 *Ophiostoma montium* Date Accessed: 8/5/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Wind Valley, Canmore, Alta. A. Rice 11-Dec-2007
 Sender: Rice, A. M002-06-03-03-UM10G17
 Cross Ref. Nos.: GenBank HQ413413 actin = GenBank HQ413641 ITS2 = GenBank HQ413489 Btub = GenBank HQ413565 EF1a
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI8 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

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- UAMH 11082 *Ophiostoma montium* Date Accessed: 8/5/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Buller Creek, Canmore, Alta. A. Rice 12-Dec-2007
 Sender: Rice, A. M002-06-04-01-UM01DL04
 Cross Ref. Nos.: GenBank HQ413468 Btub = GenBank HQ413544 EF1a = GenBank HQ413392 actin = GenBank HQ413620 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11083 *Ophiostoma montium* Date Accessed: 8/5/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Buller Creek, Canmore, Alta. A. Rice 13-Dec-2007
 Sender: Rice, A. M002-06-04-08-UM24DL39
 Cross Ref. Nos.: GenBank HQ413450 Btub = GenBank HQ413526 EF1a = GenBank HQ413374 actin = GenBank HQ413602 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI6 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11084 *Ophiostoma montium* Date Accessed: 8/5/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Buller Creek, Canmore, Alta. A. Rice 13-Dec-2007
 Sender: Rice, A. M002-06-04-10-UM35G49
 Cross Ref. Nos.: GenBank HQ413462 Btub = GenBank HQ413538 EF1a = GenBank HQ413386 actin = GenBank HQ413614 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11105 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Oldman, Crownsnest, Alta. A. Rice 7-Feb-2008
 Sender: Rice, A. M002-07-02-02-UM01DL13
 Cross Ref. Nos.: GenBank HQ413494 Btub = GenBank HQ413570 EF1a = GenBank HQ413418 actin = GenBank HQ413646 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

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- UAMH 11106 *Ophiostoma montium* Date Accessioned: 9/11/2009
 Isolation Data: ex adult mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Oldman, Crowsnest, Alta. A. Rice 7-Feb-2008
 Sender: Rice, A. M002-07-02-02-UM02DA03G52
 Cross Ref. Nos.: GenBank HQ413473 Btub = GenBank HQ413549 EF1a = GenBank HQ413397 actin = GenBank HQ413625 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11107 *Ophiostoma montium* Date Accessioned: 9/11/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Oldman, Crowsnest, Alta. A. Rice 6-Feb-2008
 Sender: Rice, A. M002-07-02-01-UM04DL04
 Cross Ref. Nos.: GenBank HQ413479 Btub = GenBank HQ413555 EF1a = GenBank HQ413403 actin = GenBank HQ413631 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11108 *Ophiostoma montium* Date Accessioned: 9/11/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Oldman, Crowsnest, Alta. A. Rice 7-Feb-2008
 Sender: Rice, A. M002-07-02-02-UM05G51
 Cross Ref. Nos.: GenBank HQ413480 Btub = GenBank HQ413556 EF1a = GenBank HQ413404 actin = GenBank HQ413632 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI6 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11109 *Ophiostoma montium* Date Accessioned: 9/11/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Cypress Hills, Alta. A. Rice 11-Oct-2007
 Sender: Rice, A. M002-08-01-40-UM06G18
 Cross Ref. Nos.: GenBank HQ413448 Btub = GenBank HQ413524 EF1a = GenBank HQ413372 actin = GenBank HQ413600 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI3 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

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- UAMH 11110 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Cypress Hills, Alta. A. Rice 10-Oct-2007
 Sender: Rice, A. M002-08-01-01-UM08G04
 Cross Ref. Nos.: GenBank HQ413451 Btub = GenBank HQ413527 EF1a = GenBank HQ413375 actin = GenBank HQ413603 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011)
- UAMH 11111 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Cypress Hills, Alta. A. Rice 10-Oct-2007
 Sender: Rice, A. M002-08-01-01-UM09G02
 Cross Ref. Nos.: GenBank HQ413463 Btub = GenBank HQ413539 EF1a = GenBank HQ413387 actin = GenBank HQ413615 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe; Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011): comparative phylogeography.
- UAMH 11112 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta*; strong bluestain present Murray FSR, Tumbler Ridge, B.C. A. Rice 7-Nov-2007
 Sender: Rice, A. M002-09-02-02-UM08DL16
 Cross Ref. Nos.: GenBank HQ413383 actin = GenBank HQ413611 ITS2 = GenBank HQ413459 Btub = GenBank HQ413535 EF1a
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI5 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11113 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex adult mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta*; strong bluestain present Gwillim Lake, Tumbler Ridge, B.C. A. Rice 8-Nov-2007
 Sender: Rice, A. M002-09-03-08-UM54DA31G68
 Cross Ref. Nos.: GenBank HQ413447 Btub = GenBank HQ413523 EF1a = GenBank HQ413371 actin = GenBank HQ413599 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).

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- UAMH 11114 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta*; strong bluestain present Valemount 1, Valemount, B.C. A. Rice 16-Oct-2007
 Sender: Rice, A. M002-10-01-08-UM12DL40
 Cross Ref. Nos.: GenBank HQ413476 Btub = GenBank HQ413552 EF1a = GenBank HQ413400 actin = GenBank HQ413628 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11115 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; strong bluestain present Valemount 2, Valemount, B.C. A. Rice 17-Oct-2007
 Sender: Rice, A. M002-10-02-04-UM05G18
 Cross Ref. Nos.: GenBank HQ413497 Btub = GenBank HQ413573 EF1a = GenBank HQ413421 actin = GenBank HQ413649 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11116 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; strong bluestain present Beaverfoot, Golden, B.C. A. Rice 03-Oct-2007
 Sender: Rice, A. M002-11-01-04-UC08G17
 Cross Ref. Nos.: GenBank HQ413475 Btub = GenBank HQ413551 EF1a = GenBank HQ413399 actin = GenBank HQ413627 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI1 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11117 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Beaverfoot, Golden, B.C. A. Rice 3-Oct-2007
 Sender: Rice, A. M002-11-01-08-UM36DL39
 Cross Ref. Nos.: GenBank HQ413498 Btub = GenBank HQ413574 EF1a = GenBank HQ413422 actin = GenBank HQ413650 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11118 *Ophiostoma montium* Date Accessed: 9/11/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta*; strong bluestain present Blaeberry, Golden, B.C. A. Rice 24-Oct-2007
 Sender: Rice, A. M002-11-03-02-UM36DL09

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Cross Ref. Nos.: GenBank HQ413486 Btub = GenBank HQ413562 EF1a = GenBank HQ413410 actin = GenBank HQ413638 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11119 *Ophiostoma montium* Date Accessioned: 9/11/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta*; moderate bluestain present Blaeberry, Golden, B.C. A. Rice 24-Oct-2007
 Sender: Rice, A. M002-11-03-04-UM38G17
 Cross Ref. Nos.: GenBank HQ413485 Btub = GenBank HQ413561 EF1a = GenBank HQ413409 actin = GenBank HQ413637 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype MI4 (fide A. Roe): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11134 *Ophiostoma montium* Date Accessioned: 10/16/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Ladner, Sparwood, Alta. A. Rice 20-Nov-2007
 Sender: Rice, A. M002-12-01-01-UM02DL04
 Cross Ref. Nos.: GenBank HQ413496 Btub = GenBank HQ413572 EF1a = GenBank HQ413420 actin = GenBank HQ413648 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011)

UAMH 11135 *Ophiostoma montium* Date Accessioned: 10/16/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Mount Wardle, Kootenay-Yoho, B.C. A. Rice 05-Dec-2007
 Sender: Rice, A. M002-16-01-03-UM20DL24
 Cross Ref. Nos.: GenBank HQ413483 Btub = GenBank HQ413559 EF1a = GenBank HQ413407 actin = GenBank HQ413635 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11136 *Ophiostoma montium* Date Accessioned: 10/16/2009
 Isolation Data: ex larvae mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Ottertail, Kootenay-Yoho, B.C. A. Rice 07-Dec-2007
 Sender: Rice, A. M002-16-02-02-UM11DL16
 Cross Ref. Nos.: GenBank HQ413482 Btub = GenBank HQ413558 EF1a = GenBank HQ413406 actin = GenBank HQ413634 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

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- UAMH 11137 *Ophiostoma montium* Date Accessed: 10/16/2009
 Isolation Data: ex wood from gallery of mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* Ottertail, Kootenay-Yoho, B.C. A. Rice 08-Apr-2008
 Sender: Rice, A. M002-16-02-07-UM53G81
 Cross Ref. Nos.: GenBank HQ413481 Btub = GenBank HQ413557 EF1a = GenBank HQ413405 actin = GenBank HQ413633 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11139 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* x *banksiana*; lots of bluestain Wilmore-Kakwa, B.C. A. Rice 10-May-2007
 Sender: Rice, A. M001-02-03-05-UC17DL22
 Cross Ref. Nos.: GenBank GU370187 beta tubulin = GenBank GU370230 EF1 alpha = GenBank GU370316 UFM = GenBank GU370144 actin = GenBank GU370273 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype CI1 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, *Mol Ecol Res* 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11140 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex larvae of mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Pinto Creek, Grande Prairie, Alta. A. Rice 28-Feb-2008
 Sender: Rice, A. M002-01-02-06-UC35DL49
 Cross Ref. Nos.: GenBank GU370202 beta tubulin = GenBank GU370245 EF1 alpha = GenBank GU370331 UFM = GenBank GU370159 actin = GenBank GU370288 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Odor fruity. // Molecular systematics ITS genotype haplotype AI1 (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, *Mol Ecol Res* 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011).
- UAMH 11141 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex larvae in mountain pine beetle (*Dendroctonus ponderosae*) in galleries in *Pinus contorta* Pinto Creek, Grande Prairie, Alta. A. Rice 28-Feb-2008
 Sender: Rice, A. M002-01-02-09-UC48DL70
 Cross Ref. Nos.: GenBank GU370204 beta tubulin = GenBank GU370247 EF1 alpha = GenBank GU370333 UFM = GenBank GU370161 actin = GenBank GU370290 ITS2
 Strain Characters: odor fruity. // Molecular systematics multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, *Mol Ecol Res* 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, *Molecular Ecology* 20: 584-600, 2011). // Biodiversity mountain pine beetle genomics project.

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- UAMH 11142 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta* Lingrell, Grande Prairie, Alta. A. Rice 5-Mar-2008
 Sender: Rice, A. M002-01-03-05-UC23G32
 Cross Ref. Nos.: GenBank GU370203 beta tubulin = GenBank GU370246 EF1 alpha = GenBank GU370332 UFM = GenBank GU370160 actin = GenBank GU370289 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Odor fruity. // Molecular systematics ITS genotype haplotype CII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).
- UAMH 11143 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta*; minimal bluestain Spray Lakes West, Canmore, Alta. A. Rice 25-Sep-2007
 Sender: Rice, A. M002-06-01-03-UM01G12
 Cross Ref. Nos.: GenBank GU370188 beta tubulin = GenBank GU370231 EF1 alpha = GenBank GU370317 UFM = GenBank GU370145 actin = GenBank GU370274 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Odor fruity. // Molecular systematics ITS genotype haplotype CII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).
- UAMH 11144 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta* Wind Valley, Canmore, Alta. A. Rice 11-Dec-2007
 Sender: Rice, A. M002-06-03-07-UM31G61
 Cross Ref. Nos.: GenBank GU370192 beta tubulin = GenBank GU370235 EF1 alpha = GenBank GU370321 UFM = GenBank GU370149 actin = GenBank GU370278 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype CII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).
- UAMH 11145 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta* Harvie Heights, Canmore, Alta. A. Rice 31-Jan-2008
 Sender: Rice, A. M002-06-05-03-UC13G15
 Cross Ref. Nos.: GenBank GU370200 beta tubulin = GenBank GU370243 EF1 alpha = GenBank GU370329 UFM = GenBank GU370157 actin = GenBank GU370286 ITS2

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Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype CII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11146 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta* Harvie Heights, Canmore, Alta. A. Rice 31-Jan-2008
 Sender: Rice, A. M002-06-05-11-UC81G86
 Cross Ref. Nos.: GenBank GU370201 beta tubulin = GenBank GU370244 EF1 alpha = GenBank GU370330 UFM = GenBank GU370158 actin = GenBank GU370287 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype CII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11147 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta* Brule Creek, Sparwood, Alta. A. Rice 12-Apr-2008
 Sender: Rice, A. M002-12-03-03-UC10G11
 Cross Ref. Nos.: GenBank GU370212 beta tubulin = GenBank GU370255 EF1 alpha = GenBank GU370341 UFM = GenBank GU370169 actin = GenBank GU370298 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype CII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11148 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta* Mount Wardle, Kootenay-Yoho, B.C. A. Rice 5-Dec-2007
 Sender: Rice, A. M002-16-01-02-UC10G11
 Cross Ref. Nos.: GenBank GU370215 beta tubulin = GenBank GU370258 EF1 alpha = GenBank GU370344 UFM = GenBank GU370172 actin = GenBank GU370301 ITS2
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype CII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11149 *Grosmannia clavigera* Date Accessed: 10/21/2009
 Isolation Data: ex wood from mountain pine beetle (*Dendroctonus ponderosae*) galleries in *Pinus contorta* Mount Wardle, Kootenay-Yoho, B.C. A. Rice 5-Dec-2007
 Sender: Rice, A. M002-16-01-05-UC32G34

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Cross Ref. Nos.: GenBank GU370210 beta tubulin = GenBank GU370253 EF1 alpha = GenBank GU370339 UFM = GenBank GU370167 actin = GenBank GU370296 ITS2

Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics ITS genotype haplotype CII (fide A. Roe): multilocus species identification and DNA barcoding (Roe AD, Rice AV, Bromilow SE, Cooke JEK, Sperling FAH, Mol Ecol Res 10:946-959, 2010): comparative phylogeography (Roe AD, Rice AV, Coltman DW, Cooke JEK, Sperling FAH, Molecular Ecology 20: 584-600, 2011).

UAMH 11150 *Grosmannia clavigera* Date Accessed: 11/4/2009

Isolation Data: mountain pine beetle (*Dendroctonus ponderosae*) gallery in *Pinus contorta* (Lodgepole pine) Kamloops, BC (C) S. Lee 2003

Sender: Breuil, C. KW1407

Cross Ref. Nos.: GenBank dbEST GT571599-GT607265 = GenBank dbEST GT610085-GT615878. = SLKW 1407 [original assigned number] = Genbank ACYC01000000 = Genbank ACXQ00000000 = Genbank ACXQ01001232 [obsolete version] = Genbank AY544615 ITS2 = GenBank AY263195 beta-tubulin = Genbank AY544597 actin = Genbank AY544638 EF1alpha

Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics expressed sequence tags from the blue-stain fungus, *Grosmannia clavigera*, a mountain pine beetle-associated pathogen (DiGuistini S, Ralph SG, Lim YW, Holt R, Jones S, Bohlmann J, Breuil C, FEMS Microbiol Lett 267(2): 151-158, 2007; Hesse-Orce U, DiGuistini S, Keeling CI, Wang Y, Li M, Henderson H, Docking TR, Liao NY, Robertson G, et al, BMC Genomics. 11:536, 2010): genome sequence (Diguistini S, Liao NY, Platt D, Robertson G, Seidel M, Chan SK, Docking TR, Birol I, Holt RA, Hirst M, et al, Genome Biol. 10(9):R94, 2009; <http://genomebiology.com/2009/10/9/R94>): identification by padlock probes (Tsui CK, Wang B, Khadempour L, Alamouti SM, Bohlmann J, Murray BW, Hamelin RC, J Microbiol Methods. 83(1):26-33, 2010): target specific PCR primers (Khadempour L, Massoumi Alamouti S, Hamelin R, Bohlmann J, Breuil C, Fungal Biol 114(10):825-833, 2010): National Center for Biotechnology Information Genome Project 39847: genome and transcriptome analyses (DiGuistini AS, Wang Y, Liao NY, Taylor G et al, PNAS 108:2504-2509, 2011). heterothallic

UAMH 11151 *Grosmannia clavigera* Date Accessed: 11/4/2009

Isolation Data: ex perithecia on mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* (Lodgepole pine) Kamloops, BC (C) S. Lee 2004

Sender: Breuil, C. 200_1_14

Cross Ref. Nos.: GenBank GT607266-GT610084 (pooled isolates)

Strain Characters: molecular systematics expressed sequence tags from the blue-stain fungus, *Grosmannia clavigera*, a mountain pine beetle-associated pathogen (Hesse-Orce U, DiGuistini S, Keeling CI, Wang Y, Li M, Henderson H, Docking TR, Liao NY, Robertson G, et al, BMC Genomics. 11:536, 2010): genome and transcriptome analyses (DiGuistini AS, Wang Y, Liao NY, Taylor G et al, PNAS 108:2504-2509, 2011): National Center for Biotechnology Information Genome Project 39847. // Biodiversity mountain pine beetle genomics project.

UAMH 11152 *Grosmannia clavigera* Date Accessed: 11/4/2009

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Isolation Data: adult mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* (Lodgepole pine) Kelowna, BC (C) S. M. Alamouti 2007
 Sender: Breuil, C. DPLKGT1B
 Cross Ref. Nos.: GenBank GT607266-GT610084 (pooled isolates)
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics expressed sequence tags from the blue-stain fungus, *Grosmannia clavigera*, a mountain pine beetle-associated pathogen (Hesse-Orce U, DiGuistini S, Keeling CI, Wang Y, Li M, Henderson H, Docking TR, Liao NY, Robertson G, et al, BMC Genomics. 11:536, 2010): genome and transcriptome analyses (DiGuistini AS, Wang Y, Liao NY, Taylor G et al, PNAS 108:2504-2509, 2011): National Center for Biotechnology Information Genome Project 39847.

UAMH 11153 *Grosmannia clavigera*

Date Accessed: 11/4/2009

Isolation Data: adult mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* (Lodgepole pine) Houston, BC (C) S. Lee 2003
 Sender: Breuil, C. H55
 Cross Ref. Nos.: GenBank GT607266-GT610084 (pooled isolates)
 Strain Characters: molecular systematics expressed sequence tags from the blue-stain fungus, *Grosmannia clavigera*, a mountain pine beetle-associated pathogen (Hesse-Orce U, DiGuistini S, Keeling CI, Wang Y, Li M, Henderson H, Docking TR, Liao NY, Robertson G, et al, BMC Genomics. 11:536, 2010): identification by padlock probes (Tsui CK, Wang B, Khadempour L, Alamouti SM, Bohlmann J, Murray BW, Hamelin RC, J Microbiol Methods. 83(1):26-33, 2010): target specific PCR primers (Khadempour L, Massoumi Alamouti S, Hamelin R, Bohlmann J, Breuil C, Fungal Biol 114(10):825-833, 2010): genome and transcriptome analyses (DiGuistini AS, Wang Y, Liao NY, Taylor G et al, PNAS 108:2504-2509, 2011): National Center for Biotechnology Information Genome Project 39847. // Biodiversity mountain pine beetle genomics project.

INFORMATION ON STRAINS

February 10, 2012

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- UAMH 11154 *Grosmannia clavigera* Date Accessed: 11/4/2009
 Isolation Data: adult mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* (Lodgepole pine) Banff, Alta. (C) S. Lee 2003
 Sender: Breuil, C. B5
 Cross Ref. Nos.: GenBank GT607266-GT610084 (pooled isolates)
 Strain Characters: molecular systematics expressed sequence tags from the blue-stain fungus, *Grosmannia clavigera*, a mountain pine beetle-associated pathogen (Hesse-Orce U, DiGuistini S, Keeling CI, Wang Y, Li M, Henderson H, Docking TR, Liao NY, Robertson G, et al, BMC Genomics. 11:536, 2010); genome and transcriptome analyses (DiGuistini AS, Wang Y, Liao NY, Taylor G et al, PNAS 108:2504-2509, 2011); National Center for Biotechnology Information Genome Project 39847. // Biodiversity mountain pine beetle genomics project.
- UAMH 11155 *Grosmannia clavigera* Date Accessed: 11/4/2009
 Isolation Data: adult mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* (Lodgepole pine) Banff, Alta. (C) S. Lee 2003
 Sender: Breuil, C. B10
 Cross Ref. Nos.: GenBank GT607266-GT610084 (pooled isolates)
 Strain Characters: molecular systematics expressed sequence tags from the blue-stain fungus, *Grosmannia clavigera*, a mountain pine beetle-associated pathogen (Hesse-Orce U, DiGuistini S, Keeling CI, Wang Y, Li M, Henderson H, Docking TR, Liao NY, Robertson G, et al, BMC Genomics. 11:536, 2010); target specific PCR primers (Khadempour L, Massoumi Alamouti S, Hamelin R, Bohlmann J, Breuil C, Fungal Biol 114(10):825-833, 2010); genome and transcriptome analyses (DiGuistini AS, Wang Y, Liao NY, Taylor G et al, PNAS 108:2504-2509, 2011); National Center for Biotechnology Information Genome Project 39847. // Biodiversity mountain pine beetle genomics project.
- UAMH 11156 *Grosmannia clavigera* Date Accessed: 11/4/2009
 Isolation Data: adult mountain pine beetle (*Dendroctonus ponderosae*) in *Pinus contorta* (Lodgepole pine) Hidden Valley, Montana (C) D. Six 2003
 Sender: Breuil, C. HV15
 Strain Characters: biodiversity mountain pine beetle genomics project. // Molecular systematics genome and transcriptome analyses (DiGuistini AS, Wang Y, Liao NY, Taylor G et al, PNAS 108:2504-2509, 2011); National Center for Biotechnology Information Genome Project 39847.