Colletotrichum jacksonii versus C. echinochloae

Thursday, 28 February 2019 1:40 PM

*Colletotrichum jacksoni*i J.A. Crouch et al., published Mycologia 100 (5), 26 Aug 2009 [ex type culture MAFF 305460] *Colletotrichum echinochloae* Moriwaki & Tsukib., published Mycoscience 50 (4), 25 July 2009 [ex type culture MAFF 511473]

Both are pathogens of Japanese millet (Echinochloa esculenta (= E. utilis)), described from specimens collected from Japan, by Crouch et al. (2009) and Moriwaki & Tsukiboshi (2009) respectively.

The only gene sequenced in common across the two studies is SOD. Sequences of the isolates included in the phylogenies in the two studies are identical, except for a non-coding region from bases 16 to 78 near the start of the fragment sequenced. For this non-coding region, all isolates in the Crouch study have one haplotype, and all isolates in the Moriwaki & Tsukiboshi study have a second haplotype.

One isolate, MAFF 511152 (blue in tree below), was sequenced in both studies - the non-coding haplotypes for this isolate differ between the studies. This suggests the different haplotypes reported in the non-coding region from the two studies are the result of some sequencing artifact.

Based on the genetic data available, together with the ecological and geographic match acrosss the two species, it is highly likely these names are synonyms; *C. echinochloae* has priority, published one month before *C. jacksonii*.

SOD phylogeny	
AB440150, Colletotrichum echinochloae SOD2 gene for manganese-su AB440151, Colletotrichum echinochloae SOD2 gene for manganese-su AB440152, Colletotrichum echinochloae SOD2 gene for manganese-su AB440153, Colletotrichum echinochloae SOD2 MAFF 5114713 TYPE AB440149, Colletotrichum echinochloae SOD2 MAFF 511152	Moriwaki & Tsukiboshi sequences
 EU554212, Colletotrichum jacksonii isolate 305460EE SOD TYPE EU554236.1, Colletotrichum jacksonii isolate 511344EE manganese-supe EU554235.1, Colletotrichum jacksonii isolate 305439EE manganese-supe EU554211, Colletotrichum jacksonii isolate 305439EE manganese-supero EU554233, Colletotrichum jacksonii isolate 511152EE manganese-supero 	Crouch et al. sequences
LU554227.1, Colletotrichum hanaui isolate 511014DC manganese-superoxide EU554205.1, Colletotrichum hanaui isolate 305404DC manganese-superoxid EU554189.1, Colletotrichum cereale isolate 23691AS manganese-superoxide dismutas EU554188.1, Colletotrichum cereale isolate 236902AS manganese-superoxide dismuta	

SOD alignment including ex-type specimens of <i>C. jacksonii</i> and <i>C. echinochloae</i> , a (2009) and Moriwaki & Tsukiboshi (2009) studies, showing differences in the non														
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2, AB440149 (Colletotrichum echinochloae MAFF 511152)	ŝ — – –							_						
3. EU554233 (Colletotrichum jacksonii isolate 511152EE manganese-superoxide dis							-							
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4. EU554212 (Colletotrichum jacksonii isolate 305460EE SOD TYPE)							-							
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P.R. Johnston, 28 Feb 2019