





**Figure S1.** Maximum likelihood phylogenetic tree of *Absidia* based on ITS and LSU rDNA sequences, respectively, with *Cunninghamella elegans* and *C. blakesleeana* as outgroup. Maximum likelihood (ML) bootstrap values ( $\geq 70\%$ ) of each clade are indicated along branches. Scale bar in the upper left indicates substitutions per site.

**1a.** ML tree of ITS sequences, **1b.** ML tree of LSU rDNA sequences.

**Table S1.** Top hits for the new species based on BLAST search for ITS sequences from type materials.

Query	Subjct	Query cover (%)	Percent identity (%)
<i>Absidia frigida</i>	<i>A. psychrophilia</i> CBS 128.68	100	88.78
	<i>A. cylindrospora</i> var. <i>nigra</i> CBS 127.68	47	92.05
	<i>A. healeyae</i> UoMAU1	71	81.96
	<i>A. edaphica</i> MFLUCC 20-0088	41	91.44
	<i>A. anomala</i> CBS 125.68	40	94.79
<i>A. gemella</i>	<i>A. pernambucoensis</i> URM:7219	60	85.68
	<i>A. healeyae</i> UoMAU1	64	84.37
	<i>A. caatinguensis</i> URM 7156	47	90.04
	<i>A. soli</i> MFLUCC 20-0089	34	93.58
	<i>A. anomala</i> CBS 125.68	39	89.52
<i>A. longissima</i>	<i>A. edaphica</i> MFLUCC 20-0088	64	86.20
	<i>A. soli</i> MFLUCC 20-0089	47	91.25
	<i>A. caatinguensis</i> URM 7156	62	85.39
	<i>A. montepascoalensis</i> URM 8218	56	86.77
	<i>A. pernambucoensis</i> URM:7219	39	94.95