

Supplementary Table

***Terfezia claverryi* MAT locus characterization uncovers evolutionary insights about sexual reproduction of Pezizomycetes and reveals mating type dynamics in mycorrhizal plants.**

Laura Andreu-Ardil¹, Ángel Guarnizo¹, Alfonso Navarro-Ródenas¹, Francisco Arenas¹, Manuela Pérez-Gilabert², José Eduardo Marqués-Gálvez^{1*}, Francesco Paolocci^{3†}, Asunción Morte^{1*†}

¹Departamento de Biología Vegetal (Botánica), Facultad de Biología, Universidad de Murcia, Campus de Espinardo, Murcia 30100, Spain

²Departamento de Bioquímica y Biología Molecular-A, Universidad de Murcia, Campus de Espinardo, Murcia 30100, Spain

³CNR-IBBR, Istituto di Bioscienze e Biorisorse, UOS di Perugia, Perugia 06128, Italy

* Corresponding authors: José Eduardo Marqués-Gálvez (joseeduardo.marques@um.es), Asunción Morte (amorte@um.es)

†These authors contributed equally as senior authors.

Table S1. List of species used for the construction of the phylogenetic tree and selection analysis based on orthologous sequences of the *T. claveryi* α - and HMG-box domains.

Species	Organism ID	GenBank accession number	Domain
<i>Ascobolus immersus</i>	Ascim1	GCA_003788565.2	ALPHA
<i>Terfezia claveryi</i>	Tercla1	GCA_015179025.1	ALPHA-HMG
<i>Terfezia boudieri</i>	Terbo2	GCA_003788615.2	HMG
<i>Kalaharituber pfeilii</i>	Kalpfe1	GCA_015179045.1	ALPHA-HMG
<i>Wilcoxina mikolae</i>	Wilmi1	GCA_014904905.1	HMG
<i>Picoa lefebvrei</i>	Piclef1	ND, 1245399 (Project ID)	HMG
<i>Sarcoscypha coccinea</i>	Sarco1	ND, 1042917 (Project ID)	HMG
<i>Pyronema domesticum</i>	Pyrdom1	GCA_024516145.1	HMG
<i>Tuber indicum</i>	Tubin1	GCA_006112555.1	HMG
<i>Tuber melanosporum</i>	Tubme1v2	GCA_000151645.1	ALPHA-HMG
<i>Tuber borchii</i>	Tubbor1	GCA_003070745.1	ALPHA-HMG
<i>Tuber canaliculatum</i>	Tubcan1	ND, 1191022 (Project ID)	ALPHA-HMG
<i>Tirmania nivea</i>	Tirniv1	GCA_015179035.1	ALPHA
<i>Mattirolomyces terfezioides</i>	Matter1	ND, 1251048 (Project ID)	ALPHA
<i>Kalaharituber pfeilii</i>	Kalpfe1	GCA_015179045.1	ALPHA
<i>Naumovozya castellii</i>	Nauca1	GCA_000237345.1	OUTGROUP
<i>Rhizopus stolonifer</i>	Rhisto1	GCA_000697035.1	OUTGROUP

ND = NOT DEFINED