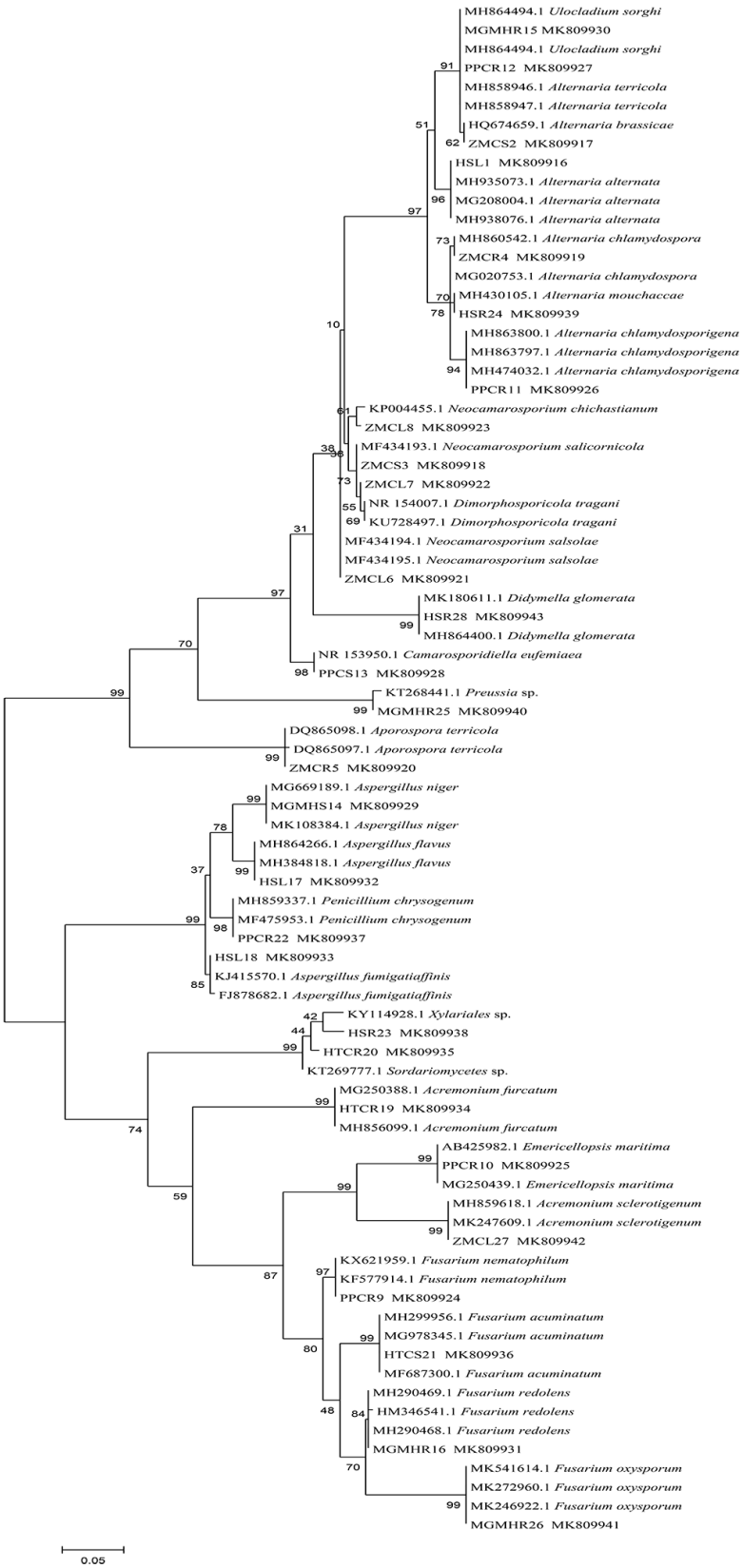

Figure S1. Maximum Likelihood tree based on rDNA ITS region sequences of 28 endophytic fungal isolates. Numbers (%) on the main branches represent bootstrap support values (for 1000 iterations). The scale bar shows a distance equal to 5% nucleotide diversity.

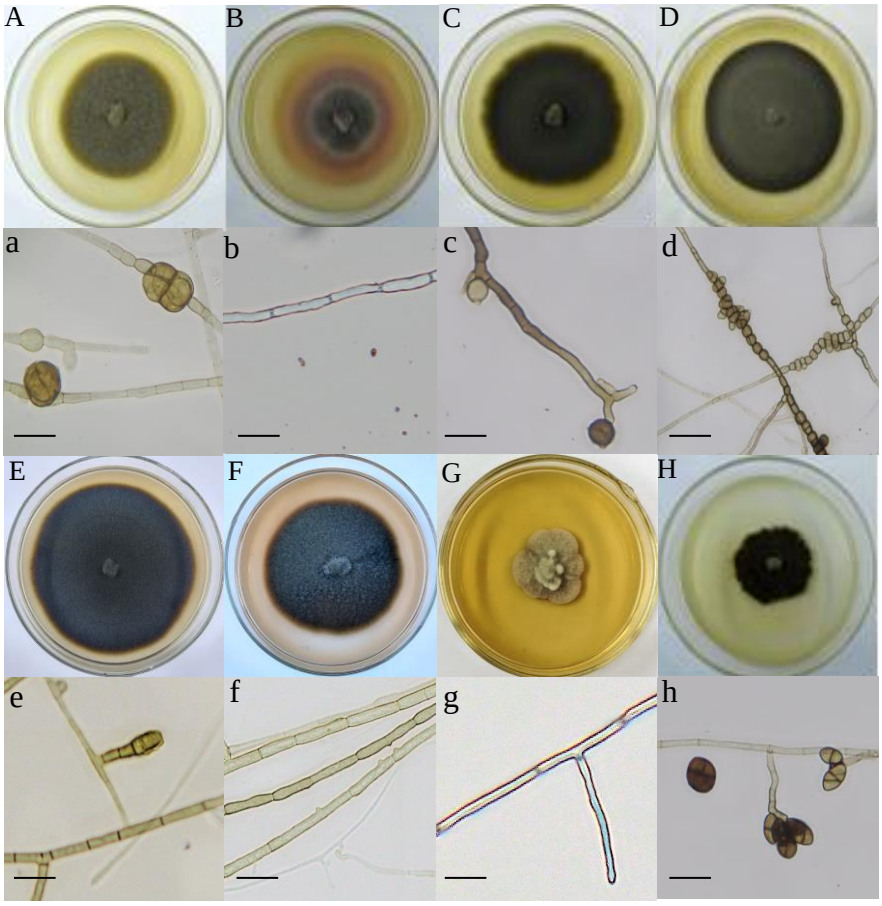

Figure S2: Morphological characteristics of endophytic fungi characterized by melanized structures and dark septate hyphae in culture isolated from the roots of five host plants. (A-H) Colonies of different endophytic fungi, and (a-h) microscopic morphology of endophytic fungi. Scale bars (a-h) = 50 μm.

Table S1 Physico-chemical characteristics of soils.

	pH	TN mg/g	TP mg/g	SOC mg/g	ACP μg/g/h	ALP μg/g/h	U μg/g/h
E. przewalskii	7.75±0.07c	0.68±0.02a	0.55±0.01a	3.36±0.49a	32.41±3.41a	35.94±3.41ab	0.27±0.06a
S. passerina	8.23±0.10bc	0.76±0.02a	0.50±0.03a	15.75±5.94a	21.20±1.49a	15.87±1.49b	0.20±0.03a
N. sphaerocarpa	8.00±0.06a	0.76±0.11a	0.53±0.02a	23.30±8.89a	34.87±2.34a	46.69±2.34a	0.20±0.03a
R. songarica	7.91±0.11ab	0.70±0.05a	0.54±0.02a	17.98±2.03a	18.65±3.17a	40.68±3.17ab	0.16±0.01a
S. regelii	8.39±0.03bc	0.88±0.12a	0.48±0.07a	12.17±2.86a	23.76±2.03a	53.80±2.03a	0.21±0.02a

Different lowercase letters represent significant differences among different plant species ($p < 0.05$). TN, total nitrogen; TP, total phosphorus; SOC, soil organic carbon; ACP, acid phosphatase; ALP, alkaline phosphatase; U, urease.