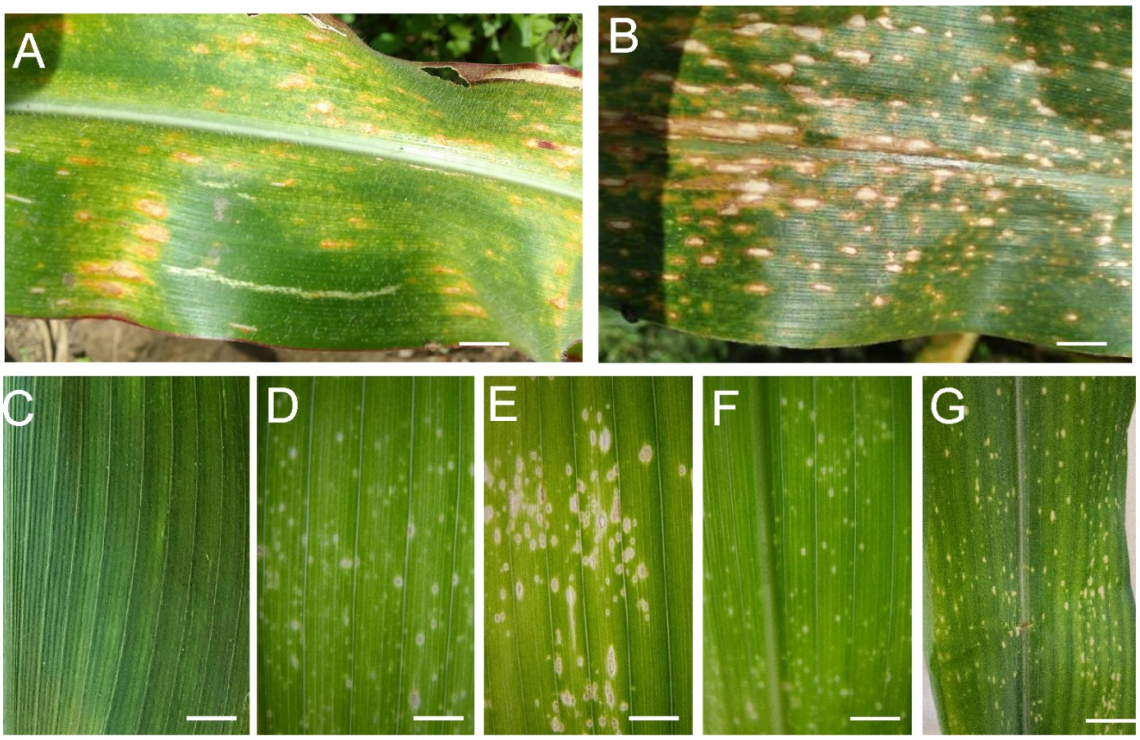
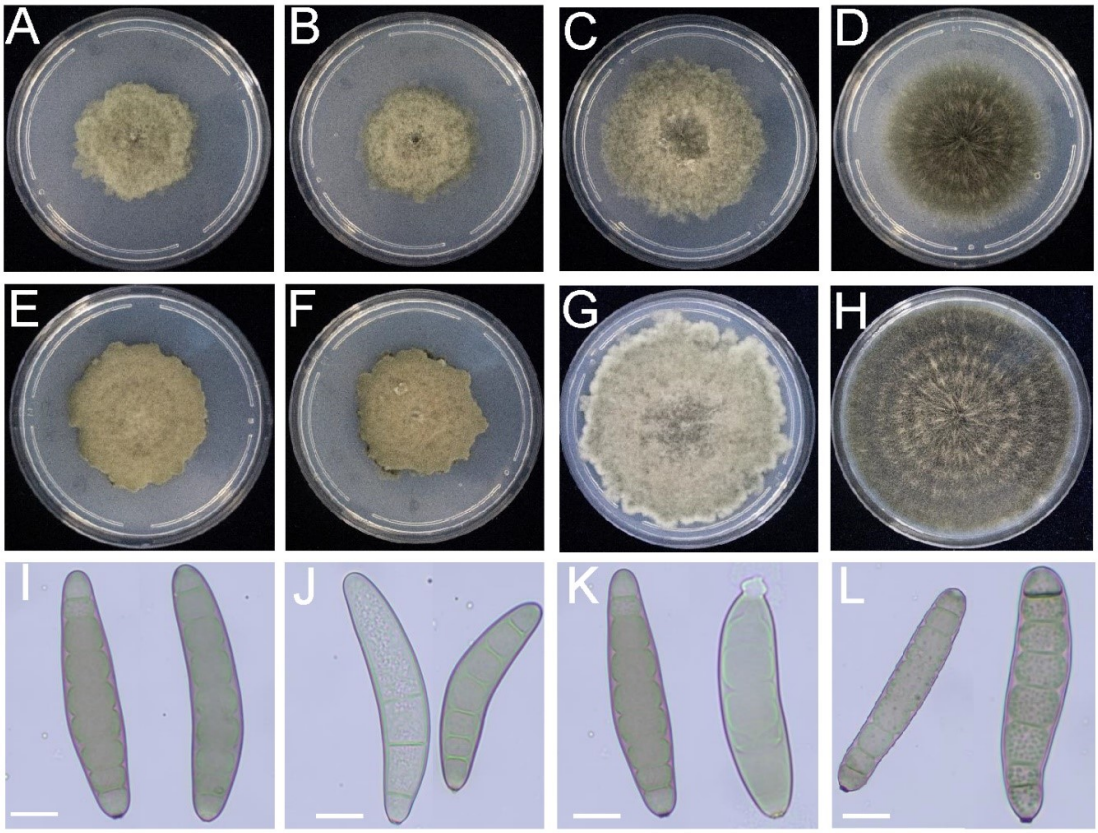
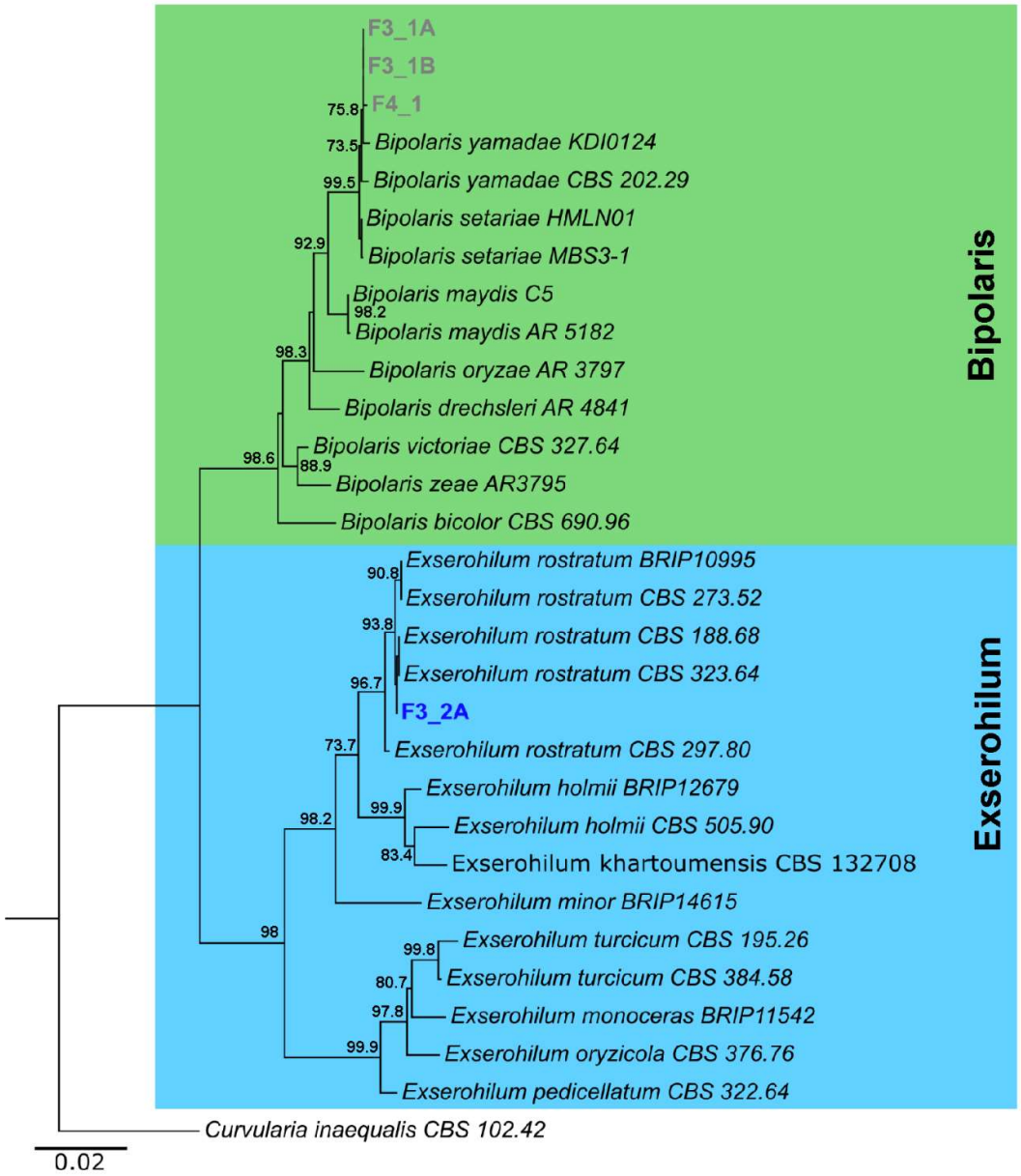


Supplementary Figure S1. Symptoms of leaf spot diseases observed in maize in the field and after the pathogenicity assay. A and B: Typical symptoms of maize leaf spots collected from the field caused by *Bipolaris yamadae* (A) and *Exserohilum rostratum* (B) observed in the maize field, respectively. C-G: Symptoms of the maize leaf spots observed after the pathogenicity assay. C: Control leaf with no symptoms (all controls did not have symptoms), D-F: Typical ovoid and oblong lesions with pale brown center associated with *B. yamadae*. G: Typical small narrow linear lesions associated with *E. rostratum*. Scale bar: A-G = 20 mm.



Supplementary Figure S2. Morphological characteristics of *Bipolaris yamadae* and *Exserohilum rostratum*. A-C: Sporulating cultures of *B. yamadae* on ¼ PDA medium at 4 days post-culture. E-G: Mature cultures of *B. yamadae* on ¼ PDA medium at 7 days post-culture. D: Culture of *E. rostratum* on ¼ PDA medium at 4 days post-culture. H: Mature culture of *E. rostratum* on ¼ PDA medium at 7 days post-culture. I-K: Conidia of *B. yamadae.* L: Conidia of *E. rostratum*. Scale bars: A-H: 60 mm diameter petri dish, I-L = 10 µm.



Supplementary Figure S3. Phylogenetic tree of ITS and *GAPDH* gene regions of *Bipolaris yamadae* and *Exserohilum rostratum*. The tree was constructed based on the maximum likelihood method using the TNe+G4 nucleotide substitution model in IQ-Tree v2.1.2 (Nguyen et al., 2015) and visualized using FigTree (http://tree.bio.ed.ac.uk/software/figtree/). The reference sequences were retrieved from GenBank (https://www.ncbi.nlm.nih.gov/genbank/). Sequence alignment and concatenation were performed using MEGA 11 software (Tamura et al., 2021). Bootstrap values were based on 1000 iterations. The tree is rooted in *Curvularia inaequalis*. The numbers on the tree are the bootstrap values used to confirm clustering. *B. yamadae* isolates F3-1A, F3-1B, and F4-1 (with accession numbers PP373829 to PP373831, for the ITS region and PP405110 to PP405112, for the *GAPDH* region were considered in this study. *E. rostratum* isolate F3-2A (with accession numbers PP373833, for the ITS region and PP405113, for the *GAPDH* region were considered in this study. The branch lengths of the concatenated tree are proportional to the relative divergence of the different species, as estimated by IQ-Tree. Scale bar indicates 0.02 units. Green and light blue blocks show the different species in the genera Bipolaris and Exserohilum used in the phylogenetic analysis.

Supplementary Table S1. Details of strains used in the construction of the phylogenetic tree. The ITS and *GAPDH* accession numbers per strain were retrieved from GenBank (https://www.ncbi.nlm.nih.gov/genbank/).

Species	Strain Number	GenBank Accession Numbers	
		ITS	*GAPDH*
Bipolaris bicolor	CBS 690.96	AF120260.1	KM042893.1
Bipolaris drechsleri	AR4841	KF500530.1	KF500533.1
Bipolaris drechsleri	FIP373	KF500531.1	KF500534.1
Bipolaris maydis	AR 5182	KM230388.1	KM034844.1
Bipolaris oryzae	AR 3797	KM230392.1	KM042894.1
Bipolaris victoriae	CBS 327.64	NG_069233.1	KM034811.1
Bipolaris zeae	AR3795	KJ909786.1	KM034816.1
Bipolaris setariae	HMLN 01	OP703520.1	OP769217.1
Bipolaris setariae	MBS 3-1	OL770257.1	OL771204.1
Bipolaris yamadae	CBS 202.29	KJ909779	KM034830
Bipolaris yamadae	KDI0124	OQ505161	OQ538099
Exserohilum corniculatum	BRIP 11426	LT837453	LT883533
Exserohilum holmii	BRIP 12679	LT837846	LT882542
Exserohilum holmii	CBS 505.90	KT265252	LT715889
Exserohilum khartoumensis	CBS 132708	LT837461	LT715888
Exserohilum minor	BRIP 14615	LT837469	LT883544
Exserohilum monoceras	BRIP 11542	LT837473	LT883546
Exserohilum oryzicola	CBS 376.76	LT837456	LT883535
Exserohilum pedicellatum	CBS 322.64	KT265258	LT715902
Exserohilum rostratum	BRIP 10995	LT837823	LT882566
Exserohilum rostratum	CBS 188.68	LT837839	LT715896
Exserohilum rostratum	CBS 273.52	LT837830	LT882558
Exserohilum rostratum	CBS 297.80	KT265244	LT715895
Exserohilum rostratum	CBS 323.64	LT837833	LT715901
Exserohilum turcicum	CBS 195.26	LT837485	LT882583
Exserohilum turcicum	CBS 384.58	LT837481	LT883552
Curvularia inaequalis	CBS 102.42	MH856096.1	KM061787.1