

**Table S2. Genome data used in this work.**

Date collection	Clade	Family	Species	BUSCO for Annotated protein (%)	Source
<b>Seed species collection</b>	Dicotyledon	Brassicaceae	<i>Arabidopsis thaliana</i> <sup>[36]</sup>	99.6	TAIR:Araport11
		Vitaceae	<i>Vitis vinifera</i> <sup>[37]</sup>	94.0	NCBI: PRJEA18785
		Theaceae	<i>Camellia sinensis</i> ‘Tieguanyin’ <sup>[38]</sup>	93.7	NGDC:GWHASIV00000000
	Monocotyledon	Poaceae	<i>Oryza sativa</i> <sup>[39]</sup>	91.8	RGAP 7
		Orchidaceae	<i>Apostasia shenzhenica</i> <sup>[40]</sup>	81.5	NCBI:PRJNA310678
Basal angiosperm	Amborellaceae	<i>Amborella trichopoda</i> <sup>[41]</sup>	98.2	NCBI:PRJNA212863	
<b>Test species collection</b>	Dicotyledon	Salicaceae	<i>Populus trichocarpa</i> <sup>[42]</sup>	98.0	NCBI:PRJNA10772
		Theaceae	<i>Camellia sinensis</i> ‘Huangdan’ <sup>[43]</sup>	95.0	NGDC:GWHAZTZ00000000
	Monocotyledon	Bromeliaceae	<i>Ananas comosus</i> <sup>[44]</sup>	99.0	NCBI:PRJNA305080
		Actinidiaceae	<i>Actinidia chinensis</i> <sup>[46]</sup>	83.4	GIGADB:PRJNA480681
	Basal angiosperm	Lauraceae	<i>Cinnamomum kanehirae</i> <sup>[45]</sup>	87.7	NCBI:PRJNA477266
<b>Validation species collection</b>	Dicotyledon	Moraceae	<i>Ficus hispida</i> <sup>[47]</sup>	93.1	CNCB:GWHALOG00000000
		Theaceae	<i>Camellia sinensis</i> ‘Longjing 43’ <sup>[48]</sup>	88.4	NGDC:GWHACFB00000000
		Theaceae	<i>Camellia sinensis</i> ‘Shuchazao’ <sup>[49]</sup>	91.4	Tea Plant Information Archive
		Theaceae	<i>Camellia sinensis</i> ‘DASZ’ <sup>[50]</sup>	93.2	NGDC:GWHASIV00000000
	Monocotyledon	Zosteraceae	<i>Zostera marina</i> <sup>[51]</sup>	91.9	NCBI:PRJNA41721
		Poaceae	<i>Zea mays</i> <sup>[52]</sup>	95.7	JGI:Zm-B73-REFERENCE-NAM-5.0.55
		Asparagaceae	<i>Asparagus officinalis</i> <sup>[53]</sup>	91.5	NCBI:PRJNA317340
	Musaceae	<i>Musa balbisiana</i> <sup>[54]</sup>	87.4	Banana Genome Hub: <a href="https://banana-genome-hub.southgreen.fr/data_search/organism">https://banana-genome-hub.southgreen.fr/data_search/organism</a>	

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