

Table S1: Information of the *Ganoderma* species and genome assemblies.

Species (Assembly accession No.)	Submitter	Geographic location of biological sample	Host	Other information
<i>G. boninense</i> G3 (GCA_002900995.2)	PT SMART Tbk, Indonesia	Indonesia	oil palm	mycelium culture
<i>G. boninense</i> NJ3 (GCA_001855635.1)	CIRAD, France	Tanah Gambus, Sumatra, Indonesia	oil palm	Carpospore; mycelium culture
<i>G. lucidum</i> G260125-1 (GCA_000262775.1)	The Institute of Medicinal Plant Development, China.	LuoTian, Hubei Province, China	-	
<i>G. lucidum</i> Xiangnong (GCA_000271565.1)	Huazhong University of Science and Technology, China	China	-	-
<i>G. lucidum</i> BCRC36111 (GCA_012655175.1)	China Medical University, China	China		Mycelium culture
<i>G. lucidum</i> BCRC37177 (GCA_000338035.1)	<i>Ganoderma lucidum</i> Research Consortium, Taiwan	Taiwan	-	-
<i>G. multipileum</i> BCRC 37180 (GCA_000338015.1)	<i>Ganoderma lucidum</i> Research Consortium, Taiwan	Taiwan	-	-
<i>G. sinense</i> ZZ0214-1 (GCA_002760635.1)	The Institute of Medicinal Plant Development, China.	LuoTian, Hubei Province, China	-	Haploid; mycelial culture
<i>G. tsugae</i> s90 (GCA_003057275.1)	Biotechnology and Nuclear Technology Research Institute, China	Wangqing, China	-	Forest; dead wood
<i>Ganoderma</i> sp. <i>BRIUMSc</i> (GCA_008694245.1)	Biotechnology Research Institute, Universiti Malaysia Sabah, Malaysia	Kudat, Sabah	oil palm	Oil palm trunk