

## WHICH MUSHROOMS GROW ON WHICH LOGS?

A practical guide to pairing tree species and fungi, with a focus on tree species in so-called Australia

Tree species		Shiitake Lentinula edodes	Pearl Oyster	Phoenix Oyster	Lions Mane Hericium coralloides	Reishi Ganoderma lucidum	Turkey Tail Ganoderma lucidum
Oak family <sub>Fagaceae</sub>	Oak  Quercus spp. / Lithocarpus spp.	1,2,3,4,5,7,8,	<b>√</b> 4,7,9	<b>*</b> 4,8	<b>√</b> 4,7,8,9	4,7,8,9	<b>√</b> 7,9
	Chestnut Castanea spp.	3,8,9			4,8,9		<b>√</b> 9
	Chinquapin  Castanopsis spp.	★ 3,4					
	Beech Fagus spp.	2,3,4,7,8,9	4,6,7,9	✓ 8	7,8	✓ 8	<b>√</b> 9
Maple family Sapindaceae	Maple Acer spp.	1,2,3,7,8	<b>√</b> 7,9	<b>√</b> 4,8	4,7,8,9	4,7,8,9	7,9
Liquidambar family	Sweetgum  Liquidambar spp.	3,4,7,8,9	<b>√</b> 7	✓ 8	<b>√</b> 7,8	4,7,8,9	<b>√</b> 7,9
Elm family  Ulmaceae	Elm Ulmaris spp.	<b>X</b> 2,8	4,6,7,9	<b>√</b> 4,8	<b>√</b> 4,7,8,9	4,8,9	<b>√</b> 7,9
Birch family  Betulaceae	Alder	3,5,7,8,9	6,7,9	<b>*</b> 4,8	V 4,8	<b>√</b> 8	<b>√</b> 7,9
	Birch	2,3,4,7,8	<b>√</b> 9	✓ 8	4,7,8		<b>√</b> 7,9
	Hornbeam Carpinus spp. / Ostrya spp.	2,3,7,8		✓ 8	<b>√</b> 7,8		
Willow family Salicaceae	Aspen / Poplar / Cottonwood	-2,3,4,5,8	4,6,7,9,	4,8,12,	7,8, •		<b>√</b> 7,9
	Willow Salix spp	3,4,8	✓ 6,●		✓ 8	4,8	✓ 8
Walnut family Juglandaceae	Hickory  Carya spp.	2,3,7,8,9					<b>√</b> 9
	Walnut Juglans spp.	7			<b>√</b> 7,8		
Eucalyptus family Myrtaceae	Spotted gum  Corymbia maculata	χ.	Х	X	Х	Х	
	River red gum	<b>√</b>	✓	✓	✓	✓	✓
	Lemon-scented gum  Eucalyptus citriodora	<b>√</b> 11	✓	✓	✓	✓	✓
	Sugar gum  Eucalyptus cladocalyx	<b>√</b> 5	✓	✓	$\checkmark$	✓	<b>√</b>
	Tasmanian blue gum  Eucalyptus globulus	4,7,8,9,	✓	✓	$\checkmark$	✓	<b>V</b> 9
	Flooded gum / Rose gum Eucalyptus grandis	10,11	<b>√</b>	✓	✓	✓	✓
	Shining gum / Silvertop  Eucalyptus nitens	✓ 5,●	$\checkmark$	✓	$\checkmark$	✓	✓
	Scribbly gum  Eucalyptus rossi	✓ .	<b>√</b>	✓	$\checkmark$	✓	<b>√</b>
	Sydney blue gum  Eucalyptus saligna	<b>√</b> 11	<b>√</b>	✓	$\checkmark$	$\checkmark$	$\checkmark$
	Manna gum / Ribbon gum  Eucalyptus viminalis	✓ .	<b>√</b>	$\checkmark$	$\checkmark$	✓	✓ •
	Tea-trees	V 13		$\checkmark$		$\checkmark$	$\checkmark$
Acacia family Fabaceae	Silver wattle	✓		✓		✓	✓
	Hickory wattle	✓		✓		✓	✓
	Blackwood Acacia melanoxylon	<b>√</b> 5		✓		✓	<b>√</b>
Pine family Pinaceae	Pine, Spruce, Fir  Pinus spp., Pseudotsuga spp., Abies spp	<b>X</b> 8		<b>√</b> 4,8	<b>X</b> 8	✓ 8	<b>√</b> 9
	Monterey / Radiata pine	<b>X</b> 8		<b>√</b> 4,8	<b>X</b> 8	✓	✓
Casuarina family Casuarinaceae	Allocasuarina Allocasuarina spp.		<b>/</b>	<b>√</b>		✓	<b>√</b>
	She-Oak Casuarina spp.		√ <sub>12</sub>	✓		✓	✓

IXL I				
Best	*			
Suitable	<b>√</b>			
Possibly suitable	✓			
Not recommended	X			
Probably not suitable	X			
Not enough data				

## **SOURCES:**

- 2. Cornell Small Farms Program. 2020. "Best Management Practices for Log-Based Shiitake Cultivation"
- 3. Przybylowicz, Donoghue. 1990. "Shiitake Growers Handbook: The Art and Science of Mushroom Cultivation .p40
- 4. Paul Stamets. 1993. "Growing Gourmet and Medicinal Mushrooms" .p48, 263, 311, 318, 356, 390
- 5. Parsuram Sharma-Luital. Rowan Reid. 2009. "Log Grown Shiitake Mushrooms. An Australian Growers Manual" .p18
- 7. Field & Forest Products. 2020. "Selecting Logs for Mushroom Growing"
- 8. North Spore. 2023. "How to Grow Mushrooms on Logs, Pillars, and Stumps"

- 11. Andrade, Minhoni, Sansigolo, Zied. 2009. "Basic wood density of seven species and three clones of eucalyptus before and during shiitake cultivation"

For the whole guide on this topic, and how to grow both edible and medicinal mushrooms at home, head to Milkwood.net

Thanks to the growers above for sharing what they're learned! And thanks to the fungi, and all the trees.

This free guide was made on melukerdee country, lutruwita (Tasmania)

HOME MUSHROOM **CULTIVATION** 

with Milkwood