

SUPPLEMENTARY TABLE S1. Mushroom species involved in poisoning incidents and their spatial and temporal distribution in China, 2021.

Clinical syndromes or mushroom species	Number of incidents	Number of patients	Deaths	Case fatality (%)	Spatial and temporal distribution
Acute liver failure					
<i>Amanita exitialis</i>	3	8	1	12.50	March 3, Guangdong; June 24 to 26, Yunnan
<i>Amanita exitialis</i> and <i>A. fuligineoides</i>	1	4	0	0	July 2, Yunnan
<i>Amanita fuliginea</i> and <i>A. oberwinklerana</i> ^{ARF}	1	5	0	0	July 5, Hunan
<i>Amanita fuligineoides</i>	2	9	1	11.11	June 25 and July 2, Fujian, and Yunnan
<i>Amanita pallidorosea</i>	1	2	0	0	June 19, Hunan
<i>Amanita rimosa</i>	1	3	0	0	June 2, Hunan
<i>Amanita subjunquillea</i>	1	2	0	0	September 17, Sichuan
<i>Amanita</i> spp.	7	19	3	15.79	June 22 to July 26, Yunnan, Hunan, Chongqing, and Zhejiang
<i>Galerina sulciceps</i>	14	39	5	12.82	April 16, Hunan; November 3 to 30, Sichuan, Chongqing, Hubei, Guizhou, and Hunan
<i>Galerina</i> sp.	1	18	0	0	December 28, Sichuan
<i>Lepiota brunneoincarnata</i>	15	45	3	6.67	July 4 to September 28, Yunnan, Hebei, Shanxi, Xinjiang, Shandong, Inner Mongolia, Ningxia, Shaanxi, Jilin, Beijing, and Tianjin
Rhabdomyolysis					
<i>Russula subnigricans</i>	16	50	6	12.00	May 10 to September 9, Yunnan, Zhejiang, Hunan, Jiangsu, Fujian, Jiangxi, Guizhou, Guangdong, and Guangxi
Acute renal failure					
<i>Amanita kotohiraensis</i>	1	2	0	0	August 19, Fujian
<i>Amanita oberwinklerana</i>	6	9	0	0	mid-March, Guangdong; July 20 to August 29, Hubei, Sichuan, and Guizhou
<i>Amanita</i> aff. <i>pseudoporphyria</i>	2	2	0	0	August 22 and 23, Hunan
Hemolysis					
<i>Paxillus involutus</i>	2	2	1	50.00	July 31 and August 7, Xizang
Gastroenteritis					
<i>Agaricus atrodiscus</i>	1	6	0	0	July 28, Yunnan
<i>Agaricus xanthodermus</i>	1	1	0	0	April 29, Hunan
<i>Agaricus</i> sp.	1	2	0	0	August 20, Hunan
<i>Baorangia major</i>	1	5	0	0	May 28, Fujian
<i>Baorangia pseudocalopus</i>	2	8	0	0	June 23, Yunnan; September 17, Hunan
<i>Boletellus indistinctus</i>	1	6	0	0	August 3, Yunnan
<i>Chlorophyllum</i> aff. <i>globosum</i>	2	8	0	0	August 30 and September 5, Sichuan
<i>Chlorophyllum hortense</i>	2	3	0	0	August 12 to September 29, Hunan, and Guangxi
<i>Chlorophyllum molybdites</i>	65	120	0	0	April 15 to December 27, Zhejiang, Guizhou, Hunan, Hainan, Fujian, Guangdong, Guangxi, Yunnan, Sichuan, Chongqing, Jiangsu, Hubei and Jiangxi
<i>Chlorophyllum molybdites</i> and <i>Cordyceps gunnii</i> ^M	1	3	0	0	August 21, Guizhou
<i>Coprinellus micaceus</i>	1	1	0	0	September 29, Beijing
<i>Coprinellus micaceus</i> and <i>Panaeolus bisporus</i> ^P	1	3	0	0	September 20, Ningxia
<i>Coprinopsis atramentaria</i>	1	1	0	0	April 19, Shandong
<i>Coprinus comatus</i>	1	1	0	0	October 19, Sichuan

Continued

Clinical syndromes or mushroom species	Number of incidents	Number of patients	Deaths	Case fatality (%)	Spatial and temporal distribution
<i>Cryptoporus volvatus</i> ^M	1	1	0	0	February 28, Guangxi
<i>Entoloma caespitosum</i>	1	4	0	0	May 24, Fujian
<i>Entoloma omiense</i>	7	22	0	0	June 6 to August 30, Fujian, Guangdong, Yunnan, Zhejiang, and Guizhou
<i>Entoloma aff. strictius</i>	1	3	0	0	April 12, Hunan
<i>Entoloma aff. sinuatum</i>	1	9	0	0	August 8, Yunnan
<i>Gymnopus densilamellatus</i> , <i>G. dryophilus</i> ^G and <i>Ripartites tricholoma</i> ^U	1	2	0	0	August 6, Hebei
<i>Gymnopus indoctus</i> ^U , <i>Leucoagaricus sinicus</i> ^U , <i>Panaeolus papilionaceus</i> ^P , <i>Ileodictyon gracile</i> ^U and <i>Agaricus sp.</i> ^U	1	4	0	0	October 14, Guangdong
<i>Heimioporus gaojiaocong</i>	3	5	0	0	January 12, Yunnan (dried boletes bought from market); June 3 to July 20, Yunnan
<i>Heimioporus japonicus</i>	2	9	0	0	August 26 and September 7, Fujian
<i>Hygrocybe rimosa</i>	1	2	0	0	July 1, Guizhou
<i>Lactarius purpureus</i>	1	1	0	0	August 29, Hunan
<i>Lactarius rubrocorrugatus</i>	2	7	0	0	July 11 and 27, Sichuan
<i>Lactifluus pseudoluteopus</i>	1	1	0	0	June 4, Yunnan
<i>Melanoleuca humilis</i>	1	2	0	0	September 15, Ningxia
<i>Neoboletus brunneissimus</i> ^{E,M} , <i>Butyriboletus yicibus</i> ^E , <i>Catathelasma subalpinum</i> ^E and <i>Cortinarius similis</i> ^U	1	3	0	0	August 16, Sichuan (dried boletes from Yunnan)
<i>Neoboletus venenatus</i>	3	12	0	0	March 10 and July 2, Hunan and Sichuan (dried boletes, bought from market); September 19, Yunnan
<i>Omphalotus guepiniformis</i>	1	3	0	0	May 1, Guizhou
<i>Omphalotus olearius</i>	2	4	0	0	July 28 and October 18, Yunnan
<i>Omphalotus sp.</i>	4	44	0	0	July 11 and October 18, Yunnan
<i>Pholiota multicingulata</i>	1	4	0	0	September 13, Chongqing
<i>Ramaria gracilis</i>	1	1	0	0	August 28, Yunnan
<i>Rubroboletus sinicus</i> and <i>Retiboletus fuscus</i> ^E	1	20	0	0	January 11, Jiangsu (dried boletes bought from market)
<i>Rubroboletus sp.</i>	1	1	0	0	August 19, Fujian
<i>Russula foetens</i>	1	1	0	0	August 26, Fujian
<i>Russula japonica</i>	24	70	0	0	May 25 to August 26, Guangxi, Hunan, Sichuan, Guizhou, Yunnan, Chongqing, Fujian, and Zhejiang
<i>Russula japonica</i> and <i>R. punctipes</i> ^G	1	2	0	0	May 31, Hunan
<i>Russula leucocarpa</i> ^U and <i>Russula sp.</i>	1	4	0	0	September 4, Fujian
<i>Russula punctipes</i>	1	6	0	0	August 23, Hunan
<i>Scleroderma aff. albidum</i>	2	9	0	0	March 7 and July 9, Guangxi and Sichuan
<i>Scleroderma cepa</i>	4	7	0	0	July 5 to August 25, Yunnan; October 27 to November 15, Hunan
<i>Suillus pinetorum</i> , <i>Amanita javanica</i> ^E , <i>Boletus bainiugan</i> ^E and <i>Phlebopus portentosus</i> ^E	1	8	0	0	April 15, Yunnan
<i>Thicholoma highlandense</i>	1	1	0	0	November 20, Guizhou
<i>Trametes hirsuta</i> ^M , <i>Irpex lacteus</i> ^M and <i>Schizophyllum commune</i> ^{E,M}	1	1	0	0	February 28, Guangdong (dried mushrooms from Sichuan)
<i>Tricholoma stans</i>	1	2	0	0	November 3, Yunnan
<i>Tricholoma aff. stans</i>	2	5	0	0	November 2 and December 1, Guizhou and Yunnan

Continued

Clinical syndromes or mushroom species	Number of incidents	Number of patients	Deaths	Case fatality (%)	Spatial and temporal distribution
Psycho-neurological disorder					
<i>Amanita ibotengutake</i>	1	17	0	0	September 5, Shandong
<i>Amanita melleialba</i>	1	1	0	0	August 10, Yunnan
<i>Amanita orientigemmata</i>	1	2	0	0	August 10, Yunnan
<i>Amanita pseudopantherina</i>	1	1	0	0	August 9, Yunnan
<i>Amanita pseudosychnopyraxis</i>	2	11	0	0	April 6 and 15, Fujian and Zhejiang
<i>Amanita orsonii</i> and <i>Amanita</i> sp. ^U	1	3	0	0	June 29, Chongqing
<i>Amanita rufoferruginea</i>	1	6	0	0	July 6, Sichuan
<i>Amanita subglobosa</i>	4	13	0	0	June 29 to August 19, Sichuan and Hunan
<i>Amanita sychnopyraxis</i> f. <i>subannulata</i>	1	5	0	0	May 28, Guangxi
<i>Clitocybe subditopoda</i>	1	3	0	0	October 26, Guizhou
<i>Clitocybe</i> sp.	1	2	0	0	October 18, Hainan
<i>Gymnopilus dilepis</i>	3	5	0	0	May 1 to July 2, Sichuan and Guizhou
<i>Inocybe</i> aff. <i>glabrodisca</i>	1	4	0	0	November 26, Guizhou
<i>Inosperma muscarium</i>	2	7	0	0	May 30 and June 5, Guangxi and Fujian
<i>Lanmaoa asiatica</i>	1	1	0	0	July 2, Yunnan
<i>Lanmaoa asiatica</i> , <i>Heimioporus japonicus</i> ^G and <i>Tylopilus neofelleus</i> ^G	1	4	0	0	January 27, Chongqing (dried boletes bought from market)
<i>Panaeolus bisporus</i>	1	2	0	0	August 14, Guizhou
<i>Pseudosperma arenarium</i> nom. prov.	2	3	0	0	September 22 and 30, Ningxia and Shaanxi
<i>Pseudosperma umbrinellum</i> and <i>Mallocybe fulvoumbonata</i> ^P	1	2	0	0	September 21, Ningxia
<i>Psilocybe ovoideocystidiata</i>	1	2	0	0	March 26, Guizhou
<i>Psilocybe papuana</i>	1	2	0	0	April 30, Hunan
Unclassified					
<i>Cortinarius cupreorufus</i> ^U	1	3	0	0	September 3, Ningxia
<i>Laccaria vinaceoavellanea</i> ^E	1	2	0	0	August 1, Yunnan
<i>Leucoagaricus barssii</i> ^E	1	2	0	0	September 6, Ningxia
<i>Porphyrellus nigropurpureus</i> ^U	1	4	0	0	August 1, Fujian
<i>Russula densifolia</i> ^E	1	2	0	0	August 13, Yunnan
<i>Scleroderma yunnanense</i> ^E	1	4	0	0	July 2, Yunnan
<i>Stropharia rugosoannulata</i> ^E	2	2	0	0	April 29 and May 16, Hunan and Chongqing
<i>Tricholoma myomyces</i> ^E	1	2	0	0	March 16, Hunan

Note: Species newly recorded as poisonous mushrooms in China are in italic bold.

Abbreviations used for mushroom poisoning incidents with more than two species: ARF=Acute renal failure, G=Gastroenteritis, P=Psycho-neurological disorder, M=Medicinal, U=Unclassified, E=Edible.