



Does India have entheomycology traditions? A review and call to research

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Supplementary Table 1 — Psychoactive Mushroom Species Reported from India

Genus	Species [synonyms]	State and occurrence citation	Holotypes ^a	Isotypes ^b	Alkaloids ^c & chemical analysis citations
<i>Amanita</i>	<i>Amanita gemmata</i> (Fr.) Bertill. (Syn.= <i>Amanita orientigemmata</i>)	Shimla (Glen), Summer Hill, Taradevi, Baghi, Jubbal & Chopal, HP ^{i,ii,iii,iv}	AMH MUBL	UNK	ibotenic acid, muscimol ^v
	<i>Amanita muscaria</i> (L.) Lam	Idukki District, KL ^{vi,vii} ; Kodaikanal, TN; Guntur, AP ^{viii,ix,x,iii,iv}	AMH MUBL	UNK	ibotenic acid, muscimol, and muscazone ^{xi,xii}
	<i>Amanita muscaria</i> Var. <i>flavivolvata</i> (Singe) Jenkens	Narkanda & Hattoo (Hatu) Peak in Shimla District of HP ^{iii,xiii}	KASH	UNK	suspected, <i>Amanita muscaria</i> ; NKA
	<i>Amanita muscaria</i> var. <i>formosa</i> Pers.	Hirpora, Gulmarg & Doodhpatheri, J&K ^{iv,xiii,xiv}	BDUK KASH	UNK	ibotenic acid, muscimol, and muscazone ^{xv,xvi}
	<i>Amanita pantherina</i> (DC ex. Fr.) Kummer	Kodaikanal, TN; Shillong & Shella in Meghalaya; HP; Chada & Dindori, MP ^{xvii,ii,iii,iv,x,xviii}	AMH KASH TF	UNK	ibotenic acid, muscimol, and muscazone ^{xv,xvi}
	<i>Amanita pantherina</i> var. <i>velatipes</i> (Atk.) Jenkens	Shimla, HP; Chajpur, UP ⁱⁱⁱ	UNK	UNK	suspected ibotenic acid, muscimol & muscazone; NKA
	<i>Amanita regalis</i> (Fr.) Bert (Syn.= <i>Amanita muscaria</i> var. <i>regalis</i> (Fr.) Bertillon	Garhwal, UK; Jaiharikhal, UP ^{xix,iv}	UNK	UNK	ibotenic acid, muscimol ^{xx,xxi}
<i>Claviceps</i>	<i>Claviceps purpurea</i> (Fr.) Tul.	Maharashtra; WB; TN ^{xxii,xxiii}	UNK	UNK	ergotamine ^{xxvi,xxvii}
<i>Copelandia</i>	<i>Copelandia bispora</i> (Malençon & Bertault) Singer & R.A. Weeks [Syn.= <i>Panaeolus bisporus</i> (Malençon & Bertault) Ew. Gerhardt)	Tirunelveli & Mundanthurai Tiger Reserve, TN; KL ^{xxviii,iv}	MUBL	UNK	bluing on exposure psilocybine psilocine ^{xxix}
	<i>Copelandia cyanescens</i> (Berk. & Broome) Singer [Syn.= <i>Panaeolus cyanescens</i> (Berk. & Broome) Sacc.]	Sinhgad, MH; Madras & Guindy Deer Park, TN; WB ^{xxx,xxviii,iv,xxxi,xxxii,xxxiii,xxxiv}	AMH	UNK	baeocystine psilocybine psilocine ^{xxxv,xxxvi,xxxvii}

(Contd.)

Supplementary Table 1 — Psychoactive Mushroom Species Reported from India (Contd.)

Genus	Species [synonyms]	State and occurrence citation	Holotypes ^a	Isotypes ^b	Alkaloids ^c & chemical analysis citations
	<i>Copelandia tirunelveli</i> [Syn.= <i>Panaeolus tirunelveli</i> (Natarajan & Raman) Ew. Gerhardt]	Tirunelveli, Mundanthura & Kodimudi Teak Plantations, TN ^{xxxviii, iv, xxviii}	MUBL	UNK	bluish-gray in cap; NKA
	<i>Copelandia tropica</i> Natarajan & Raman	Myladumpara & Paraadi at Cardamom Estates, KL ^{iv, xxviii}	MUBL	UNK	turns turquoise on bruising; NKA
<i>Gymnopilus</i>	<i>Gymnopilus braendlei</i> (Peck) Hesler (Syn.= <i>Gymnopilus braendlei</i> (Peck) Singer)	Jodpala, Coorg District (Kodagu), KA ^{xxxix, xl}	MUBL	UNK	pileus staining with greenish tint ^{xi}
	<i>Gymnopilus luteus</i> (Peck) Hesler	Koynadu Coorg District (Kodagu), KA ^{xxxix}	MUBL	UNK	staining bluish-green at base, psilocybin ^{xli, xlii}
	<i>Gymnopilus spectabilis</i> [Syn.= <i>Gymnopilus junonius</i> P. D. Orton]	Poonkunnam in Thrissur & Kuthirakkodi, Begur, Wayanad Dt., KL; Dodabetta, Ooty & Nilgiris, TN ^{xliii, iv, xxviii, xlv, xlv}	MUBL KFRI MF	UNK	psilocybine, bis-noryangonin, & hispidin ^{xlvi, xlvii, xlviii}
<i>Inocybe</i>	<i>Inocybe corydalina</i> var. <i>corydalina</i> Quéf.	KL, TN ^{x, xlix}	AMH	UNK	baeocystine, psilocybine, & psilocine ^{xlix, l}
<i>Panaeolus</i>	<i>Panaeolus africanus</i> Ola'h	KL; Madras, Children's Park, TN; ^{iv, xxviii, xxxiii}	MUBL	ULQ	psilocybine & psilocine ^{li, liii}
	<i>Panaeolus cyanoannulata</i> Atri, M. Kaur & A. Kaur sp. nov.	Jeewanpur Jattan, Hoshiarpur Dist., PB ^{lv}	PUN	UNK	blue staining species; NKA
	<i>Panaeolus castaneifolius</i> (Murrill) A.H. Smith	Sangrur Dist., PB ^{lv}	PUN	UNK	Psilocybine ^{lii}
	<i>Panaeolus cinctulus</i> (Bolton) Britzelm	Palakkad, KL ^{xxxiii}	TBGT	UNK	psilocybine
	<i>Panaeolus cyanescens</i> (Berk. & Broome) Sacc. (see <i>Copelandia cyanescens</i>)	KL ^{iv, xxxiii}	TBGT	UNK	baeocystine, psilocybine, & psilocine ^{lvi, lvii}
	<i>Panaeolus subbalteatus</i> (Berk. & Brome) Sacc. [Syn.= <i>Panaeolus cinctulus</i> (Bolton) Sacc.]	Palakkad, KL; Madras & Guindy Deer Park, TN ^{iv, xxviii, xxxiii, lii}	TBGT ENCB	UNK	baeocystine & psilocybine ^{xliv, lviii, lix, lx}
	<i>Panaeolus tropicalis</i> Ola'h	Patiala, PB ^{xxxviii, lv}	PUN	UNK	Psilocybine ^{lii, liii}
<i>Psilocybe</i>	<i>Psilocybe aztecorum</i> var. <i>bonetii</i> (Guzmán) Guzmán [Syn.= <i>Psilocybe bonetii</i> Guzmán]	KL Ooty, Nilgiris, & Dodabetta, TN ^{iv, xxviii, xlii, lxi, lxii}	MUBL	ENCB	Psilocybine ^{lx, lxiii}
	<i>Psilocybe caeruleoannulata</i> Singer ex Guzmán	Thiruvananthapuram Dist., Kallar, KL ^{xxxiii}	TBGT	UNK	psilocybine, psilocine ^{lxiv}
	<i>Psilocybe cubensis</i> (Earle) Singer	BR; Orissa; Munnar, Sasthanada, Arippa, Muthanga, Brahmagiri & Thirunelly in KL: Madras & Guindy, TN ^{iv, xxviii, xxxiii, xlv, lxii}	XAL MUBL KFRI MF	L	baeocystine, psilocybine, & psilocine ^{lviii, lkv, lxvi}
	<i>Psilocybe fimetaria</i> (P.D. Orton) Watling	Heggala-Thora, Virajpet, Kodagu (Coorg) Dist. & Mysore Dist., KA ^{lxvii}	MUBS NCKKRSMF	UNK	psilocybine, psilocine ^{lxviii}
	<i>Psilocybe indica</i> Sathe & J.T. Daniel	Munnar, Idukki Dist., KL ^{lxix, lxx}	AMH	UNK	turning pale blue on bruising NKA
	<i>Psilocybe keralensis</i> K. A. Thomas, Manim. & Guzmán	Ponkuzhy, Wayanad Dist., KL ^{lxii}	XAL	L	bluing on cap & stipe NKA

Supplementary Table 1 — Psychoactive Mushroom Species Reported from India (*Contd.*)

Genus	Species [synonyms]	State and occurrence citation	Holotypes ^a	Isotypes ^b	Alkaloids ^c & chemical analysis citations
	<i>Psilocybe natarajanii</i> Guzmán [Syn.= <i>Psilocybe aztecorum</i> var. <i>bonetii</i> (Guzmán) Guzmán sensu Natarajan & Raman]	Tiger Shola Forest & Kodaikanal, TN ^{xxviii, lxi, lxx}	MUBL	L	suspected, see <i>Psilocybe pseudoaztecorum</i> NKA
	<i>Psilocybe pseudoaztecorum</i> [syn.= <i>Psilocybe aztecorum</i> var. <i>aztecorum</i> sensu Natarajan & Raman]	Kodaikanal & Nilgiris, TN ^{xxviii, lxi, lxx}	MUBL	L	bluing in stipe NKA
	<i>Psilocybe samuiensis</i> Guzmán, Bandala & J. W. Allen	Devikulam Lake & Munnar, Idukki Dist., KL ^{xliv, xlv, lxxi}	KFRI MF	XAL & BISH	baeocystine, psilocybine, & psilocine ^{lxxii}
	<i>Psilocybe semilanceata</i> (Fr.) P. Kumm.	Poona (Pune) & Sinhadagad, MH ^{xxx, lxxiii, lxxiv}	AMH	UNK	Baeocystin & psilocybine ^{xlix, l, lxxv}
	<i>Psilocybe subaeruginascens</i> Höhnel	Vellarimala Hills, Calicut Dist., KL ^{lxii}	XAL	L	psilocybine & psilocine ^{lxxvi}
	<i>Psilocybe subcubensis</i> Guzmán [Syn.= <i>Psilocybe cubensis</i> (Earle) Singer]	Muthanga Wildlife Sanctuary, Wayanad Dist., KL ^{lv, xxviii, lxii}	XAL	L	psilocybine & psilocine ^{lxxvii, lxxviii}
	<i>Psilocybe wayanadensis</i> K. A. Thomas, Manin, & Guzmán	Muthanga & Wayanad Dist., KL ^{xliv, lxii}	XAL	L	blue bruising NKA

Abbreviations in Table

^aHolotypes: **AMH**= Ajrekar Mycological Herbarium of M. A. C. S., Pune; **BISH**=Bishop Museum Herbarium Pacificum, Honolulu, Hawaii; **BDUK**= Botany Department University of Kashmir; **ENCB**=Instituto Politécnico Nacional de México; **KASH**=Herbarium of Plant Taxonomy, Division of Botany, Kashmir University, Kashmir; **KFRI MF**=Kerala Forest Research Institute-Macrofungi; **MUBL**=Herbarium of Madras Univ. Botany Laboratory, Madras, India; **MUBSNCKKRSMF**= Department of Biosciences, Mangalore University, Mangalagangothri, Mangalore Karnataka, India; **PUN**=Herbarium Punjabi Univ., Patiala, Punjab, India; **TBGT**=Herbarium of Jawaharlal Nehru Tropical Botanical Garden and Research Center (JNTBGRI), Thiruvananthapuram, India; **TF**=Tropical Forest Research Institute in Madhya Pradesh, India; **ULQ**=Université Laval, Quebec; **XAL**=Instituto de Ecología, A. C. Herbarium, Xalapa, Veracruz, Mexico; ^bIsotypes: **L**=Leiden Univ., Leiden, Netherlands; **BISH**=Bishop Museum Herbarium Pacificum, Honolulu, Hawaii; **ENCB**= Instituto Politécnico Nacional de México, **XAL**= Instituto de Ecología, A. C. Herbarium, Xalapa, Veracruz, Mexico; **ULQ**=Université Laval, Quebec.

^cAlkaloids and Citations: Bluing indicates presence of psilocin or psilocybin; **NKA**= **No Known Analyses**

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