Known errata, questions & omissions

Known corrections:

Back flap of softcover

The final "s" in "leptolobus" should be in green not black

p 2:

The é in Libertié should be bold

p 21:

"imageson" should read "images on"

p. 74:

"caeruloannulata" should read "caeruleoannulata"

p. 87:

Earlier supposition by Jochen Gartz concerning the structure of aeruginascin proved to be incorrect.

Aeruginascin was determined to be a quaternary ammonium compound: N, N, N-trimethyl-4-phosphoryloxytryptamine. JENSEN *et al.* 2006

p. 92:

Photo of *Psilocybe liniformans* v. *americana* was incorrectly credited to J.W. Allen.

This image was reported to be a photo taken by Paul Stamets. Our thanks to James Edmond for bringing this to our attention and to Paul Stamets both for noticing it and for graciously granting permission to include it in the next edition - correctly attributed.

p. 116:

"Märki et al. 1932" should read "Märki et al. 1961"

p. 262

The comment "[Also appears listed in the literature as "Occurrence of Bufotenine (5-hydroxy-N,N-dimethyltryptamine in Schizophrenic Patients."]" is in reference to an erroneous citation.

The correct citation for the article with that title is Tanimukai, H., *et al.* (1967) Life Sciences 6 (16): 1697-1706. "Occurrence of bufotenin (5-hydroxy-N,N-dimethyltryptamine) in urine of schizophrenic patients." (H. Tanimukai, R. Ginther, J. Spaide, J.R. Bueno & H.E. Himwich)

p 298:

"Thanks Snu!" should read "Information thanks to Snu Voogelbreinder"

p 300:

"Photo by Sinbad Vine" should read "Photos by Sinbad Vine"

Known questions:

A dangling question involves a *Psilocybe* growing in Oakland that was believed by their grower to be *Psilocybe cyanescens*. This was propagated using what was believed to be wild mycelium that was collected on woodchip mulch in Tilden Park.

The identification of these photos of woodchip-bed cultivated fungi has been questioned and *Psilocybe azurescens* has been suggested as an alternate identity. All of the images involved (pages 54, 56, 69, 82, 227, 231 & 301) came from a single flush.

Anecdotal accounts of human bioassays also report a low alkaloid content for these carpophores suggesting that it may be neither species. For example, one person had weak but nice results after eating a dozen freshly harvested mushrooms. Which seems rather unlike *azurescens*?

I do not know the answer.

James Edmond sent these 2 images to illustrate the question.



Trout's Notes

Known omissions:

Front flap of softcover - Ayahuasca book's URL: http:/erowid.org/library/books_online/ayahuasca_apa/

Under opening comments (p 3)

Banisteriopsis was finally observed being used in the preparation of a traditional snuff. Robin Rodd witnessed and bioassayed highly potent snuff prepared from *Anadenanthera peregrina* seeds pounded to a paste with the fresh shoots of *Banisteriopsis caapi* before being kneaded with ash and heated to dryness. (RODD 2002)

Under N,N-Dimethyltryptamine (p. 29) Anadenanthera falcata (BENTH.) SPEG. DMT 3% of 4.9% dry wt. in seed DMT 0.07% dry wt. in pod SÁVIO NUNES et al. 1982 (via GC-MS)

Under N,N-Dimethyltryptamine (p. 32) *Piptadenia gonoacantha* (MART.) MACBR. DMT 0.48% dry wt. in seed. DMT 0.07% dry wt. in pods. DMT 35% of 0.2% dry wt. in bark. SÁVIO NUNES *et al.* 1982 (via GC-MS)

Under blueing list (pp. 80-81):

Psilocybe aequatoriae Singer Psilocybe naematoliformis Guzmán Psilocybe neocaledonicum Guzmán & Horak Psilocybe neorhombispora Guzmán Guzmán 2004

Under psilocybin (p. 86):

In a controlled double-blind experiment, researchers reported that 61% of participants given a strong dose of psilocybin (as 30 milligrams of psilocybin per 70 kilograms of body weight) had a "full mystical experience," as measured on established psychological scales. Two-thirds of the 36 participants rated the experience as either the single most meaningful experience or among top five most meaningful experiences of their lives. 79% of the participants reported a moderate or greatly increased sense of well-being or life satisfaction two months after taking the drug. None had previously used any hallucinogen and over half were active in church or an-other spiritual community. GRIFFITHS *et al.* 2006

Under bufotenine (p 107):

Acacia obtusifolia has apparently been reported to contain variable amounts of bufotenine in the resin extracted from the stembark. In the four samples where it was reportedly observed, it was as a minor component that appeared to be highest in a winter extract compared to the faint traces in a summer extracts (using gcms.) (TROUT 2005)

This appears to be the first report of bufotenine in an *Acacia* species. It was not corroborated by a second worker's gc-ms but Sasha suggested to me that this was possibly due to a lack of the appropriate column equilibration. The presence of bufotenine was more recently supported in 2005 by Ott using tlc with known reference material according to a friend who was visiting him when this occurred. (ANONYMOUS in personal communication.)

Betacarboline(s) are thought have been observed in the root bark (suggested by fluorescence and bioassay results in summer of 2003) but there has been no attempt at identification.

One stem bark alkaloid was thought to possibly be 1,2-dimethyl -1,2,3,4-tetrahydro- β -carboline based on that second worker's gcms but that was never confirmed. (Trout 2005)

Earlier hplc-ms work by Mulga appears to have also observed a betacarboline in the stem bark but it was not identified.

Mulga did not observe bufotenine. (MULGA 2005)

In all cases mentioned above, DMT was the major alkaloid. The question has been raised whether the N-oxide was observed rather than bufotenine but no one seems to have followed up on it.

Under Bufotenine (p. 107)

Anadenanthera falcata (BENTH.) SPEG. Bufotenine 0.0049% dry wt. in seeds. Bufotenine 0.0056% dry wt. in pods. Bufotenine 0.96% dry wt. in bark.

SÁVIO NUNES et al. 1982 (via GC-MS)

Under Bufotenine (p. 108)

Piptadenia gonoacantha (MART.) MACBR.

Bufotenine 0.0022% dry wt. in bark.

SÁVIO NUNES et al. 1982 (via GC-MS)

Brosmium acutifolium HUBER subsp. *acutifolium* C.C.BERG [Moracaea]

"takini"

Bufotenine was present in the variety but not in the parent species. White latex was found to contain $0.7 \ \mu g$ of bufotenine per ml. Red latex was found to contain $23.4-25 \ \mu g$ of bufotenine per ml.

Bufotenine is not found to be present in the bark.

Novice shamans drink the latex and smoke the bark but later in life apparently only drink the latex.

Only the frothy red latex is used. The translucent white latex that preceeds it when the tree is tapped is discarded.

Bufotenine is believed to be the active component even though only a total of 12.5 mg was present in the 500 ml portion of red latex consumed. [kt: More work seems to be needed to assess the impact of the role of the smoking of bark by novices.]

The drink produced a strongly sedative component in addition to its hallucinogenic action.

MORETTI et al. 2006

Under Bufotenine (p. 110)

Present in:

Osteocephalus taurinus Osteocephalus oophagus Osteocephalus langsdorffii Costa et al. 2005 (via RP-HPLC, ESI-MS/MS, UV, IR, NMR)

Under 5-Methoxy-N,N-dimethyltryptamine (p. 127) *Anadenanthera falcata* (BENTH.) SPEG. 5-MeO-DMT 4.655% dry wt. in seeds. 5-MeO-DMT 0.266% dry wt. in pods.

SÁVIO NUNES et al. 1982 (via GC-MS)

Under 5-Methoxy-N,N-dimethyltryptamine (p. 128)

Piptadenia gonoacantha (MART.) MACBR. 5-MeO-DMT 0.12% dry wt. in seeds.

Sávio Nunes *et al.* 1982 (via GC-MS)

Under References:

Agurell, S. & J.L. Nilsson (1968) Acta chemica Scandinavica 22 (4): 1210-1218. "Biosynthesis of psilocybin. II. Incorporation of labelled tryptamine derivatives."

Agurell, S. & J.L. Nilsson (1968) *Tetrahedron Letters* 9 :1063-1064. "A biosynthetic sequence from tryptophan to psilocybin."

Agurell, S. *et al.* (1966) *Acta pharmaceutica Suecica* 3 (1): 37-44. "Biosynthesis of psilocybin in submerged culture of *Psilocybe cubensis*. 1. Incorporation of labelled tryptophan and tryptamine." (S. Agurell, S. Blomkvist & P. Catalfomo)

CAM (2000) "Risk assessment report relating to paddos (psilocin and psilocybin)." *Coördinatiepunt Assessment en Monitoring nieuwe drugs (Coordination Centre for the Assessment and Monitoring of new drugs, CAM*) c/o Inspectie voor de Gezondheidszorg (Health Care Inspectorate, IGZ), The Hague, February 2000. 36 pages.

Costa, T.O. *et al.* (2005) *Toxicon* 46 (4): 371-5. "Occurrence of bufotenin in the *Osteocephalus* genus (Anura: Hylidae)." (T.O. Costa, R.A. Morales, J.P. Brito, M. Gordo, A.C. Pinto & C. Bloch Jr.)

Daly, John W. *et al.* (1993) "Amphibian Alkaloids." Chapter Three in G. A. Cordell (ed.) *The Alkaloids*. Vol. 43.

Griffiths, R. R. et al. (2006) Psychopharmacology 142: 41-50. "Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance." (R. R. Griffiths, W. A. Richards, U. McCann & R. Jesse) www.hopkinsmedicine.org/Press_releases/2006/GriffithsCommentaries.pdf

Guzmán, Gastón (2004) *Sociedad Mexicana de Micología* 18: 27-29. "Revision of the classification of the genus *Psilocybe*. I. Section Neocaledonicae, a new section in *Psilocybe*."

Jensen, N. *et al.* (2006) *Planta Medica* 72(7): 665-666. "Aeruginascin, a trimethylammonium analogue of psilocybin from the hallucinogenic mushroom *Inocybe aeruginascens*." (N. Jensen, J. Gartz & H. Laatsch)" Märki, F. *et al.* (1961) *Journal of the American Chemical Society* 83 (15): 3341-3342. "Dehydrobufotenine, a novel type of tricyclic serotonin metabolite from *Bufo marinus.*" (F. Märki, A.V. Robertson & B. Witkop)

Mulga (2005) *The Entheogen Review* 14 (1): 113-115. "HPLC-MS analysis of *Acacia obtusifolia*."

Museo dei civico Roverto is now a bad link.

Noman (2006) *The Entheogen Review* 15 (3): 91-92. "DMT for the Masses."

Riceberg, L.J. & H.V. Vunakis (1978) *Journal of Pharmacology* & *Experimental Therapeutics* 206 (1): 158-166. "Determination of N,N-dimethylindolealkylamines in plasma, blood & urine extracts by radioimmunoassay & high pressure liquid chromatography."

Rodd, Robin (2002) *Journal of Psychoactive Drugs* 34 (3): 273-279. "Snuff Synergy: Preparation, Use and Pharmacology of Yopo & *Banisteriopsis caapi* Among the Piaroa of Southern Venezuela."

Sávio Nunes, Domingos, et al. (1982) Sociedad Brasiliera Para O Progresso da Cienca 34a. Reuniao Anual 6 a 14 de Julho, 1982. page 486; entry 17-D.2.5. "Alcalóides triptamínicos de Piptadenia gonoacantha (Mart.) Macbr. e Andadenanthera falcata (Benth.) Speg." (Domingos Sávio Nunes, Geraldo N. da Rocha Filho, Elaine Elisabetsky & Lauro E.S. Barata)

Tanimukai, H. *et al.* (1967) *Life Science* 6 (16): 1697-1706. "Occurrence of bufotenin (5-hydroxy-N,N-dimethyltryptamine) in urine of schizophrenic patients." (H. Tanimukai, R. Ginther, J. Spaide, J.R. Bueno & H.E. Himwich)

Trout, Keeper (2005) *The Entheogen Review* 14 (1): 116-118. "Some thoughts on analysis and comparisons of extracts and synthetic DMT."





Phalaris aquatica flowering (in Victoria) Upper left *Acacia obtusifolia* phyllodes (in Victoria) Rest of page