Mescaline reported in *Trichocereus* species
assembled by **Keeper Trout**

"species"	Collection # or cv. name	%M	Form	Origin	Reference
			(a) = dry green parenchyma only **(b)** = dry whole plant (aerial part) **(c)** = fresh plant **(d)** = extract		
Trichocereus bridgesii **(AKA** *Echinopsis lageniformis***)**					
	na	0.12%	(b)	Horticulture, Oz	Anonymous Unpublished
	"Yowie Fat"	0.16%	(b)	Horticulture, Oz	Anonymous Unpublished
	na	0.18%	(a)	Horticulture, Gillette	Ogunbodede *et al.* 2010
	na	0.23%	(b)	Horticulture, Oz	Anonymous Unpublished
	na	0.25%+	(b)	Horticulture, European	Agurell 1969b
	na	0.56%	(a)	La Paz, Bolivia	Serrano 2008
	"Eileen" **(Note 1)**	2%	(b)	Horticulture, Oz	Anonymous Unpublished
f. **monstrose**	*na*	0.48%	(a)	Horticulture, California	Ogunbodede *et al.* 2010
	na	1.16%	(b)	Horticulture, Oz	Anonymous Unpublished
Trichocereus cuzcoensis **(AKA** *Echinopsis cuzcoensis***)**					
	na	0.0%	(a)	Cotaruse, Arequipa, Peru	Serrano 2008
	na	0.0%	(a)	Huaytampo, Cuzco, Peru	Serrano 2008
	na	0.0%	(a)	Huacarpay, Cuzco, Peru	Serrano 2008
	na	0.0%	(a)	Capacmarca, Cuzco, Peru	Serrano 2008
	na	0.005–0.05%	(c)	Horticulture Germany	Agurell *et al.* 1971
		+ results were also reported in Lindgren *et al*. 1971			
Trichocereus macrogonus **(AKA** *Echinopsis macrogona***)**					
	na	0.005-0.025%	(c)	Horticulture, Europe	Agurell *et al.* 1969b

Trichocereus pachanoi **(AKA** ***Echinopsis pachanoi*****)**					
	na	0.00%	(a)	El Alisal, San Marcos, Cajamarca, Peru	Cjuno *et al.* 2009
	"PC"	0%	(b)	Horticulture Oz	Unpublished Anonymous
	"PC"	0.16%	(b)	Horticulture Oz	Unpublished Anonymous
	"PC"	0.17%	(b)	Horticulture Oz	Unpublished Anonymous
	na	0.109–2.375%	(b)	Horticulture Switzerland (6 specimens)	Helmlin & Brenneisen 1992
	na	5%	(a)	Cultivated Lima Botanical Garden	Cruz Sanchez 1948
	na	0.15-0.155%	(b)	Horticulture California	Pummangura *et al.* 1982a
	na	2.06%	(b)	Horticulture Italy	Gennaro *et al*. 1996
	na	0.331%	(b)	Horticulture California	Crosby & McLaughlin 1973
	na	0.9%	(d)	Drug plant from Peru	Turner & Heyman 1960
	na	0.025% +	(c)	Horticulture European	Agurell 1969b
	na	0.04–0.067%	(c)	Horticulture European	Agurell 1969a
	na	0.067–0.079%	(c)	Horticulture European	Bruhn & Holmstedt 1976a
	na	1.2%	(b)	Huancabamba, Peru witches market material from Claudine Friedberg	Poisson 1960
	na	4.5	(a)	Witches market material, Peru	Gonzales Huerta 1960
	na	0.78%	(b)	Chiclayo, Peru	Reyna Pinedo & Flores Garcés 2001
	na	1.4%	(b)	Barranca, Peru	Reyna Pinedo & Flores Garcés 2001

Trichocereus pachanoi **(AKA** ***Echinopsis pachanoi*****) continued**					
	na	0.23%	(a)	Moyán, San Vincente, Lambayeque, Peru	Cjuno *et al.* 2009
	na	0.28%	(a)	Puykate, Ferreñafe, Lambayeque, Peru	Cjuno *et al*. 2009
	na	0.45%	(a)	Kuntur Wasi, San Pablo, Cajamarca, Peru	Cjuno *et al*. 2009
	na	0.94%	(a)	Tocmoche, Chota, Cajamarca, Peru	Cjuno *et al*. 2009
	na	1.14%	(a)	Laquipampa, Ferreñafe, Lambayeque, Peru	Cjuno *et al.* 2009
	na	0.54%	(a)	cv *peruvianus* Huancabamba shorter spines	Ogunbodede *et al.* 2010 **(Note 2)**
	na	1.2%	(a)	cv *peruvianus* Huancabamba longer spines	Ogunbodede *et al.* 2010 **(Note 2)**
	na	0.00%	(a)	Cataratas, Otuzco, La Libertad, Peru	Cjuno *et al.* 2009
	na	0.38%	(a)	Yanasara, Sánchez Carrión, La Libertad, Peru	Cjuno *et al*. 2009
	PCH *et al.* 6212	0.82%	(a)	Clone collected Rio Marañon, La Libertad Dept., Peru	Ogunbodede *et al.* 2010
	na	1.4%	(a)	cv. Juuls Giant **(Note 3)**	Ogunbodede *et al.* 2010
	na	4.7%	(a)	Matucana, Peru **(Note 4)**	Ogunbodede *et al.* 2010

***Trichocereus pallarensis* (Name invalid. Probably f. *Echinopsis pachanoi*)**					
	FR 676	0.47%	(a)	Ritter seed via H. Winter	Ogunbodede *et al*. 2010
Trichocereus pachanoi*X*scopulicola **(AKA *Echinopsis* hybrid)**					
		0.07%	(b)	Horticulture, Oz	Anonymous Unpublished
Trichocereus peruvianus **(AKA *Echinopsis peruviana*)**					
	na	0.0%	(b)	Harvested in Peru	Djerassi *et al*. 1955 (**Note 5)**
	na	0.0%	(b)	Horticulture European commercial	Agurell 1969b **(Note 6)**
	na	0.056%	(*na*)	Commercial product	Health Canada 2004 (**Note 7)**
	na	0.25%	(a)	Chavin de Huantar, Huari, Ancash, Peru	Cjuno *et al*. 2009
	KK242	0.24%	(a)	Grown from a cutting sent by Knize in Peru.	Ogunbodede *et al.* 2010
	KK 242	0.817%	(b)	Horticulture California	Pardanani *et al*. 1977 **(Note 8)**
Trichocereus puquiensis **(AKA *Echinopsis peruviana var. puquiensis*)**					
	na	0.11%	(a)	Incuyo, Parincochas, Ayacucho, Peru	Serrano 2008/ Cjuno *et al.* 2009
	na	0.13%	(a)	Chumpi, Parincochas, Ayacucho, Peru	Serrano 2008/ Cjuno *et al.* 2009
	PCH 1256a	0.13%	(a)	Clone was collected in Ayacucho Dept., Peru	Ogunbodede *et al.* 2010
				"*across canyon from Pachan*"	

	na	0.28%	(a)	Chaviña, Lucanas, Ayacucho, Peru	Serrano 2008/ Cjuno *et al.* 2009
	na	0.50%	(a)	Vado, Lucanas, Ayacucho, Peru	Serrano 2008/ Cjuno *et al.* 2009
T. riomizquiensis **(Name invalid. Probably f.** *Echinopsis pachanoi***)**					
	FR 856	0.4%	(a)	NMCR via Rivière de Caralt	Ogunbodede *et al.* 2010
T. santaensis **(AKA** *Echinopsis santaensis* **Probably f.** *Echinopsis pachanoi***)**					
	na	0.31%	(a)	Mancos, Yungay, Ancash, Peru	Cjuno *et al.* 2009
	OST 92701	0.32%	(a)	Horticulture, California Seed from Santa Valley, Ancash Dept., Peru	Ogunbodede *et al. 2010*
T. scopulicola **(AKA** *Echinopsis scopulicola***) Probably now extinct in the wild.**					
	FR 991	0.85%	(a)	NMCR via Rivière de Caralt	Ogunbodede *et al*. 2010
T. schoenii **(Now lumped as synonym of** *Echinopsis cuzcoensis***)**					
	na	0.22%	(a)	Cotahuasi, La Unión, Arequipa, Peru	Serrano 2008/ Cjuno *et al.* 2009
	na	0.20%	(a)	Pampacola, Castilla, Arequipa, Peru	Serrano 2008/ Cjuno *et al.* 2009
	na	0.14%	(a)	Huambo, Arequipa , Peru	Serrano 2008/ Cjuno *et al.* 2009
T. strigosus **(AKA** *Echinopsis strigosa***)**					
	na	0.0% **Note 9**	(c)	European horticutural	Agurell *et al.* 1971

	na	trace	(a)	Argentina: Mendoza & San Juan Prov.	Nieto *et al.* 1982
T. taquimbalensis **(AKA** *Echinopsis taquimbalensis***)**					
	na	0.22%	(a)	Netherlands horticutural	Agurell *et al.* 1971

T. terscheckii **(AKA** *Echinopsis terscheckii***)**					
	na	0.005–0.025%	(c)	European horticultural	Agurell 1969b
	na	0.0–0.04% **Note 10**	(b)	wild Argentina	Reti & Castrillón 1951
T. thelegonoides **(AKA** *Echinopsis thelegonoides***)**					
	na	0% **Note 11**	(a)	Germany horticutural	Agurell *et al.* 1971
	na	traces	(a)	Italian horticutural	Siniscalco 1983
T. uyupampensis **(AKA** *Echinopsis uyupampensis* or not recognized**)**					
	na	0.05%	(a)	UC Backeberg clone from Monaco	Ogunbodede *et al.* 2010
T. validus **(AKA** *Echinopsis valida***)**					
	na	0.025% +	(c)	Kew Gardens	Agurell *et al*. 1971
T. vollianus **(AKA** *Echinopsis volliana***)**					
	na	traces	(b)	Italian horticultural	Siniscalco 1983
T. werdermannianus **(AKA** *Echinopsis werdermanniana***)**					
	na	0.005–0.025%	(c)	European horticultural	Agurell 1969a / Agurell 1969b

Endnotes

Note 1 A wide range in potency has been claimed for Eileen by its growers.

Note 2 These variants were grown by two different commercial propagators using the same seed stock that was collected by Dick Van Geest at Huancabamba, Peru during the 1960s.

Note 3 cv. Juuls Giant was assigned a trade name name to differentiate it from the predominate *pachanoi* cultivar also being propagated commercially by Cactus Gems (Jim Daniel). It is suspected to have originated in a UC expedition but losing its labeling during transportation back to the US a few decades ago. Daniel got it from Tom Juul, hence the name.

Note 4 The Matucana *pachanoi* was obtained from a collector providing material to Peruvian witches' markets. The plant collector has requested anonymity.

Note 5 This assay was flawed for mescaline but the material was reported devoid of any alkaloid.

Note 6 Agurell found tyramine was the major alkaloid with three minor alkaloids.

Note 7 An unidentified alkaloid was the major (0.093%):10 others were present.

Note 8 Produced from Knize's KK242 seed grown by Abbey Garden

Note 9 Agurell reported hordenine as the only detectable alkaloid.

Note 10 Reti & Castrillón found mescaline was sometimes absent from their higher alkaloid material.

Note 11 Agurell reported hordenine as the only detectable alkaloid.

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Material in this presentation was based and expands on a talk given at the Women's Visionary Congress.

The data in this table was assembled by Keeper Trout.
Any variation in facts between this and Ogunbodede *et al.* 2010 most likely reflects a correction or inclusion of additional data.
Please bring any errors to my attention.

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