Table 8. Alkaloid content (mg/100 g fresh weight) of uncooked vegetable

Family name	Sp.	Scientific name	Compound name	Compound group	n[1]	Mean[2]	Range	Reference[3]
Solanaceae								
Potato (tuber)	1	*Solanum tuberosum*	α-Solanine	Glycoalkaloids	17	4.51	0.48-22.10	[1,2]
			α-Chaconine	Glycoalkaloids	17	2.60	0.25-15.90	[1,2]
			Calystegine B2	Tropane	10	1.33	0.22-5.73	[1,3]
			Calystegine A1	Tropane	8	0.51	0.07-0.56	[1]
			Nicotine[4]	Pyridine	17	0.66	ND-1.23	[4-6]
Nightshade (whole plant)	5	*Solanum americanum, Solanum chenopodioides, Solanum nigrum, Solanum retroflexum, Solanum villosum*	β-Solamargine	Glycoalkaloids	5	41.36	ND-107.80	[7]
			α-Solamargine	Glycoalkaloids	5	21.14	ND-55.33	[7]
			Solasonine	Glycoalkaloids	5	40.94	22.11-63.80	[7]
			α-Solanine	Glycoalkaloids	5	40.19	16.50-62.70	[7]
Eggplant (fruit)	1	*Solanum melongena*	α-Solamargine	Glycoalkaloids	3	1.15	0.85-1.61	[8]
			α-Solasonine	Glycoalkaloids	3	0.28	0.17-0.40	[8]
			Calystegine B2	Tropane	2	3.67	0.05-7.30	[3]
			Nicotine[4]	Pyridine	14	0.45	ND-1.50	[4,6]
Gboma eggplant	1	*Solanum macrocarpon*	α-Solamargine	Glycoalkaloids	3	143.05	124.40-197.50	[8]
			α-Solasonine	Glycoalkaloids	3	20.90	16.10-23.50	[8]
Scarlet eggplant	1	*Solanum aethiopicum*	α-Solamargine	Glycoalkaloids	3	2.13	0.58-4.86	[8]
			α-Solasonine	Glycoalkaloids	3	0.66	0.41-1.00	[8]
Tomato (ripe fruit)	1	*Solanum lycopersicum*	α-Tomatine	Glycoalkaloids	8	0.39	0.03-1.10	[9,10]
			Dehydrotomatine	Glycoalkaloids	1	ND	ND	[10]
			Calystegine B2	Tropane	1	0.45	0.45	[3]
			Nicotine[4]	Pyridine	18	0.38	ND-1.15	[4-6]
			Myosmine[4]	Pyridine	6	0.06	0.05-0.07	[11]
Hot pepper (fruit)	5	*Capsicum annuum, Capsicum chinense, Capsicum frutescens, Capsicum baccatum, Capsicum pubescens*	Capsaicin	Benzylamine	98	47.70	ND-289	[12,13]
			Dihydrocapsaicin	Benzylamine	98	32.41	ND-225	[12,13]
			Nonivamide	Benzylamine	8	1.24	0.04-2.98	[13]
			Nicotine[4]	Pyridine	2	0.75	0.63-0.87	[4]
			Calystegine B2	Tropane	1	0.03	0.03	[3]
Salvadoraceae								
Needle bush (leaf)	1	*Azima tetracantha*	Azimine	Piperine	2	33.00	32.70-33.30	[14]
			Azcarpaine	Piperine	2	18.80	18.30-19.30	[14]
			Carpaine	Piperine	2	5.65	5.50-5.80	[14]
Convolvulaceae								
Sweet potato (tuber)	1	*Ipomoea batatas*	Calystegine B2	Tropane	2	2.41	0.42-4.40	[3]
Brassicaceae								
Cauliflower (flower)	1	*Brassica oleracea* var. *botrytis*	Nicotine[4]	Pyridine	1	0.38	0.38	[5]
Fabaceae								
Fenugreek (seed)	2	*Trigonella foenum-graceum*	trigonelline	Pyridine	4	192	30-373	[15]
			4-hydroxyisoleucine	Pyridine	4	120	ND-259	[15]
Lupin 1 (seed)	1	*Lupinus albus*	Lupanine	Quinolizidine	30	1354	50-1880	[16,17]
			Albine	Quinolizidine	30	317	20-459	[16,17]
			Multiflorine	Quinolizidine	30	181	0-370	[16,17]
Lupin 2 (seed)	1	*Lupinus angustifolius*	Lupanine	Quinolizidine	1	550	550	[16]
			Angustifoline	Quinolizidine	1	455	455	[16]
			13-Hydroxylupanine	Quinolizidine	1	379	379	[16]
Lupin 3 (seed)	1	*Lupinus campestris*	Hydroxyaphyllidine	Quinolizidine	1	2088	2088	[16]
			Hydroxyaphylline	Quinolizidine	1	285	285	[16]
Boraginaceae								
Comfrey (leaf)	1	*Symphytum officinale*	Intermidine[4]	Pyrrolizidine	2	33.8	1.6-66	[18]
			Lycopsamine[4]	Pyrrolizidine	2	17.9	1.8-34	[18]
Dioscroreaceae								
Trifoliate yam (tuber)	1	*Dioscorea dumetorum*	Dioscorine[4]	Isoquinuclidine	2	73.2	67.2-79.2	[19]
			Dihydrodioscorine[4]	Isoquinuclidine	2	33.6	31.2-36.0	[19]

[1] n refers to number of sample

[2]Mean is calculated as the average from every reported mean, ND (not detected) is assumed as zero for mean calculation

[3] References (methods): [1]Friedman et al., 2003 (HPLC-UV detector), [2]Friedman and Dao, 1992 (HPLC-UV detector), [3]Asano et al., 1997 (GC-MS) [4]Siegmund et al., 1999 (GC-MS), [5]Domino et al., 1993 (GC-MS), [6]Liu et al., 2013 (UHPLC-MS/MS), [7]Mohy-ud-Din et al., 2010 (HPLC-UV detector), [8]Sanchez-Mata et al., 2010 (HPLC-MS/MS), [9]Friedman and Levin, 1995 (HPLC-PAD detector), [10]Kozukue et al., 2004 (HPLC-UV detector), [11]Tyroller et al., 2002 (GC-MS), [12]Antonius and Jarret, 2006 (GC-MS), [13]Kozokue et al., 2005 (HPLC-UV detector), [14]Bennett et al., 2004 (LC-MS), [15]Gopu et al., 2008 (HPTLC-UV detector), [16]de Cortes Sánchez et al., 2005 (GC-NPD detector), [17]Musquiz et al., 1994 (Capillary GLC-MS), [18]Avula et al., 2011 (UHPLC-MS), [19]Abiodun et al., 2013 (not mentioned)

[4]Data shown in µg/100 g fresh weight

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