

Table Major compounds present in the Jhadu grass and Trap grass.

Grass	Extract	RT	Area %	Major compounds
Jhadu	Ethanol	4.97	12.02	Ethoxyacetaldehyde diethylaceta
Jhadu	Ethanol	33.28	14.80	Hexadecanoic acid
Jhadu	Ethanol	36.18	9.22	(Z,Z,Z) 9,12,15-Octadecatrienoic acid
Jhadu	Water	4.50	40.36	(R, R, R) -2,3-Butanediol
Jhadu	Water	15.56	10.30	Catechol
Trap	Ethanol	33.26	9.95	Hexadecanoic acid
Trap	Ethanol	35.58	7.34	(Z,Z,Z)-9,12,15-Octadecatrienoic acid, methyl ester (Linolenic acid, methyl ester)
Trap	Ethanol	35.77	6.75	Phytol (3,7,11,15-Tetramethylhexadec-2-en-1-yl acetate)
Trap	Ethanol	36.20	15.12	(Z,Z,Z) 9,12,15-Octadecatrienoic acid
Trap	Ethanol	43.34	26.25	Sitosterol (beta or gamma)
Trap	Water	4.52	46.66	2,3-Butanediol
Trap	Water	11.32	4.84	Cystine

β -sitosterol is known to control cholesterol levels, reduce the activity of cancer cell, promote prostate gland health and enhance immunity in the human body. β -sitosterol can also be found in vegetable oils such as: wheat germ oil, cotton seed oil and so on. Gamma-sitosterol, an epimer of beta-sitosterol. Gamma sitosterol has been reported for the first time in *Girardinia heterophylla* and has potential to be used as an antidiabetic owing to its remarkable medicinal properties.

2,3-butanediol is produced by a variety of microorganisms, 2, 3-butanediol facilitated maintenance of bacterial populations in the pepper rhizosphere. 2, 3-butanediol was formed to divert the cellular metabolism away from production of acidic compounds.

References Je-Chiuan Ye, Wei-Chun Chang, Dennis Jine-Yuan Hsieh and Meen-Woon Hsiao (2010). **Extraction and analysis of β -sitosterol in Herbal Medicines.** *Journal of Medicinal Plants Research Vol. 4(7), pp. 522-527.* DOI: 10.5897/JMPR10.337 [Link: http://www.academicjournals.org/JMPR](http://www.academicjournals.org/JMPR) ISSN 1996-0875

Nisha Tripathi, Sunita Kumar, Rakesh Singh, C.J.Singh, Prashant Singh and V.K.Varshney (2013). Isolation and Identification of - Sitosterol by GC-MS from the Leaves of *Girardinia heterophylla* (Decne). *The Open Bioactive Compounds Journal*, 2013, 4, 25-27.

| <https://doi.org/10.3389/fmicb.2016.00993>

