

CHEMICAL COMPOSITION OF THE ESSENTIAL OIL OF *Hyssopus cuspidatus* FROM XINJIANG, CHINA

Palida Abliz*, Yuanyuan Cong, Mirigul Musa,
Yan Zhu, and Rena Kasimu

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The genus *Hyssopus* (Labiatae), consisting of about 15 species, is distributed in Central Asia, South Europe, and North Africa. In China, there are only two species, *Hyssopus cuspidatus* Boiss and *H. latilabiatus* C. Y. Wu et H. w. Li, all growing in Xinjiang [1]. Both of them have been used as nectar source plants and medicinal plants. In Xinjiang, *H. cuspidatus* Boiss. has also been used in traditional Uygur medicine in the treatment of cough, asthma, bronchitis, trauma, and rheumatism [2, 3]. As the major *Hyssopus* resource for medical use in China, there are few reports on the essential oil of *Hyssopus cuspidatus* previously.

We identified a total of 36 compounds in the hydrodistilled essential oil of *Hyssopus cuspidatus* from Xinjiang, China, with germacrene D (18.67%), hexadecanoic acid (17.53%), germacrene B (15.61%), (+)*trans*-caryophyllene (8.04%), and (+)spathulenol (4.11%) as the main components (Table 1). Further investigation of *Hyssopus cuspidatus* essential oil is still needed.

TABLE 1. Composition of the Essential Oil of *Hyssopus cuspidatus*

Compound	Rt, min	Content, %	Compound	Rt, min	Content, %
1,8-Cineole	28.51	0.23	Cadinene	64.19	0.52
Linalool	34.18	0.39	Elemol	66.19	0.37
1-Methyl-5,6-diethenylcyclohexene	37.58	0.34	Isoxadinene	67.79	0.81
Camphor	38.15	0.62	(+)-Spathulenol	68.07	4.11
4-Terpinene	40.81	0.33	Caryophyllene oxide	68.37	3.05
Pulespenone	45.23	0.33	Cetane	74.63	1.06
Cumaldehyde	45.64	0.84	2-Lanolin alcohol-1	75.58	0.48
4-Methy-3-isopropenyl-4-vinyl-1-cyclohexene	49.40	0.68	Tetradecanoic acid	78.12	0.65
Copaene	54.96	0.30	Octadecane	80.08	0.60
β -Bourbonene	55.57	0.67	6,10,14-Trimethyl-2-pentadecanone	82.29	6.08
β -Elemene	55.81	0.60	Nonadecane	85.28	0.64
<i>trans</i> -Caryophyllene	58.02	8.04	Hexadecanoic acid	88.72	17.53
Farnesene	59.79	2.43	Heliannuol	90.56	1.19
α -Caryophyllene	60.36	1.14	Heneicosane	94.93	1.43
Germacrene D	62.02	18.67	4,4-Dimethyl-1-heptene	95.26	0.32
Ledene	62.58	0.51	Octadecatrienoic acid methyl ester	96.93	2.00
Germacrene B	62.92	15.61	Tricosane	104.12	1.12
β -Bisabolene	63.44	1.14	Ledol	108.43	0.5

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School of Pharmaceutical Sciences, Xinjiang Medical University, 830054, Urumqi, Xinjiang, P. R. China, fax: 0991 4362473, e-mail: palida3345@yahoo.com.cn. Published in *Khimiya Prirodnikh Soedinenii*, No. 3, p. 374, May–June, 2009. Original article submitted November 5, 2007.