

Study	Gholivand et al. (2009)	Gholivand et al. (2009)	Howes et al. (2009)	Howes et al. (2009)	Chai et al. (2023)	Chai et al. (2023)	Chai et al. (2023)	Chai et al. (2023)
Extraction Method	Hydro-distillation	Headspace Single-drop Microextraction (HD_HSME)	Essential oil of unspecified extraction method	Thermal desorption	Hydro-distillation	Ethanol extraction and rotary evaporation	Supercritical CO <sub>2</sub> extraction	Butane extraction and rotary evaporation
Plant part	Fruit	Fruit	Fruit	Fruit	Fruit	Fruit	Fruit	Fruit
Origin	From a local market in Shiyan, Hubei, China	Purchased from the local market in Shiyan, Hubei, China	Mixed origin	Mixed origin	Yulin City (Guangxi Province) China	Yulin City (Guangxi Province) China	Yulin City (Guangxi Province) China	Yulin City (Guangxi Province) China
Compound								
Trans-anethole	85.69	81.4	80.8	81.3	78.6	81.81	79.74	81.54
Limonene	2.92	6.5	0.4	0.4	3.4	0.36	1.61	1.64
Anisaldehyde	1.79	1.81	3.3	4.5	0.92	0.75	0.74	0.75
Estragole	0.53	0.5	4	0.8	10.7	2.96	3.37	3.13
Linalool	0.38	0.42	1.4	0.7	2.03	0.73	0.7	0.76
Chavicol	2.69	2.1	-	-	0.005	0.023	0.03	ND
1,8 Cineole	0.39	0.12	-	tr	0.2	1.28	0.86	1.31
Foeniculin	-	-	1.5	3.5	0.14	5.87	5.93	4.92

\* Star anise is the industrial source of shikimic acid