**Supplementary table 1.** Chemical variability of essential oils of the most important Mediterranean *Salvia* species.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Major compounds (> 10 %)** | **Country** | | **ISO** | **Reference** |
| *Salvia officinalis* | | | | |
| β-pinene (9.3-14.5 %), α-thujone (13.2-16.1%), camphor (19.8-24.0 %) | | *in vitro* plant culture (Spain) | + | (Santos-Gomes and Fernandes-Ferreira, 2003) |
| 1,8-cineole (9.4-14.2 %), α/β-thujone (33.0-53.7 %), camphor (10.3-18.6 %), α-humulene (5.8-14.8 %) | | Germany | +/- | (Brieskorn and Melchior, 1969) |
| 1,8-cineole (22.1-44.8 %), camphor (12.5-15.3 %), β-pinene (3.0-10.4 %) | | Italy\* | - | (Svoboda and Deans, 1992) |
| 1,8-cineole (23.0-58.4 %), camphor (6.2-14.7 %), β-pinene (6.7-22.3 %) | | Turkey\* | - |
| camphor (11.6-22.0 %), thujone (7.0-25.3 %) | | England\* | +/- |
| 1,8-cineole (10.4-11.7 %), camphor (15.2-27.4 %), thujone (19.8-28.8 %) | | Croatia\* | + |
| 1,8-cineole (42.0 %) | | Greece | - |
| 1,8-cineole (4.6-12.0 %), α-thujone (12.0-55.2 %), camphor (4.7-23.1 %), α-humulene (3.4-11.6 %) | | Spain\*, \*\*\* | +/- | (Santos-Gomes and Fernandes-Ferreira, 2001) |
| 1,8-cineole (6.9-18.5 %), α-thujone (8.5-25.4 %), camphor (0.2-21.1 %), viridiflorol (9.2-26.1 %) | | Montenegro\* | +/- | (Couladis et al., 2002) |
| 1,8-cineole (6.4-16.7 %), α-thujone (19.5-19.9 %), camphor (9.7-24.8 %), viridiflorol (6.0-9.6 %) | | Serbia\* | +/- |
| 1,8-cineole (12.8-15.5 %), α-thujone (31.8-36.8 %), camphor (15.8-24.7 %) | | Finland\* | +/- | (Galambosi et al., 2002) |
| 1,8-cineole (4.1-21.1 %), α-thujone (33.9-73.12 %) | | Croatia\*\*\* | + | (Zutic et al., 2003) |
| 1,8-cineole (12.7 %), α-thujone (17.4 %), α-humulene (13.3 %) | | Portugal | + | (Lima et al., 2004) |
| 1,8-cineole (11.3-13.3 %), α-thujone (12.2-16.0 %), β-thujone (16.4-20.5 %), manool (6.6-11.0 %) | | Austria\*\* | + | (Grassi et al., 2004) |
| α-thujone (57.0 %), β-thujone (15.0 %), viridiflorol (14.2 %) | | Croatia | - | (Maksimović et al., 2007) |
| 1,8-cineole (11.9 %), α-thujone (21.0 %), β-thujone (10.1 %), camphor (23.9 %) | | France | + | (Raal et al., 2007) |
| 1,8-cineole (14.6 %), α-thujone (18.6 %), camphor (13.7 %) | | Hungary | + |
| 1,8-cineole (12.6 %), α-thujone (19.6 %), camphor (19.2 %) | | Belgium | + |
| 1,8-cineole (45.3 %), camphor (11.3 %) | | Greece | - |
| camphor (29.8 %), borneol (11.8 %) | | Scotland | + |
| α-thujone (18.7 %), β-thujone (11.7 %), camphor (12.7 %), viridiflorol (15.7 %) | | Moldova | + |
| 1,8-cineole (5.3-14.6 %), α-thujone (15.2-26.6 %), β-thujone (5.2-12.9 %), camphor (16.4-20.0 %) | | Estonia\* | +/- |
| 1,8-cineole (12.0 %), α-thujone (29.5 %), camphor (22.5 %) | | Montenegro | + | (Damjanovic-Vratnica et al., 2008) |
| α-thujone (24.9-27.4 %), β-caryophyllene (9.2-15.8 %), viridiflorol (9.3-11.5 %) | | Bulgaria | + | (Lamien-Meda et al., 2010) |
| 1,8-cineole (15.5-20.5 %), α-thujone (24.2-36.4 %), β-caryophyllene (1.5-13.5 %), virifdiflorol (4.4-11.8 %) | | Croatia | +/- |
| 1,8-cineole (9.4-10.6 %), α-thujone (4.5-36.9 %), β-caryophyllene (2.6-10.5 %), virifdiflorol (4.9-11.8 %) | | Germany | + |
| 1,8-cineole (10.5-11.9 %), α-thujone (22.3-23.3 %), α-humulene (12.5-15.1 %) | | Greece | + |
| 1,8-cineole (11.3-12.7 %), α-thujone (26.1-28.7 %), β-caryophyllene (13.2-15.0 %), virifdiflorol (12.4-14.3 %) | | Hungary | + |
| α-thujone (28.7-33.1 %), camphor (6.3-10.4 %), virifdiflorol (10.1-10.4 %), manool (9.5-10.4 %) | | Italy | + |
| α-thujone (36.0 %) | | Hungary | + | (Máthé et al., 2010) |
| 1,8-cineole (5.0-15.7 %), α-thujone (12.3-49.7 %), β-thujone (1.7-44.9 %), camphor (5.5-36.5 %) | | Croatia\* | +/- | (Jug-Dujaković et al., 2012) |
| α-thujone (7.8-20.1 %), camphor (10.5-20.6 %), γ-muurolene (2.9-13.8 %), sclareol (6.7-23.1 %) | | Italy\* | + | (Russo et al., 2013) |
| α-thujone (16.9-40.3 %), camphor (12.7-35.4 %), 1,8-cineole (6.4-12.1 %), β-thujone (1.5-10.3 %) | | Montenegro\* | + | (Steševic et al., 2014) |
| 1,8-cineole (10.9-12.7 %), α-thujone (13.0-14.4 %), camphor (19.0-23.0 %) | | Slovenia\* | + | (Cvetkovikj et al., 2015) |
| 1,8-cineole (8.0-10.1 %), α-thujone (10.3-49.7 %), β-thujone (1.5-27.7 %), camphor (5.2-36.5 %) | | Croatia\* | +/- |
| α-thujone (7.1-24.6 %), camphor (10.1-38.0 %) | | Bosnia and Herzegovina\* | + |
| 1,8-cineole (6.8-13.5 %), α-thujone (17.5-27.3 %), camphor (12.8-26.7 %) | | Macedonia\* |  |
| α-thujone (23.4-26.8 %), camphor (14.9-19.6 %) | | Serbia\* | + |
| 1,8-cineole (6.4-11.4 %), α-thujone (13.3-18.4 %), camphor (3.8-25.4 %) | | Romania\* | + |
| 1,8-cineole (8.4-10.6 %), α-thujone (13.9-23.4 %), camphor (6.4-15.3 %) | | Moldova\* | +/- |
| camphor (12.5-25.0 %) | | Bulgaria\* | + |
| 1,8-cineole (5.6-20.1 %), α-thujone (29.6-49.7 %), β-thujone (3.8-14.89 %), camphor (14.0-25.4 %) | | Spain\* | + | (Cutillas et al., 2017) |
| *Salvia officinalis* subsp. *lavandufolia* | | | | |
| camphor (27.0 %), 1,8-cineole (17.0 %), borneol (14.5 %), β-pinene (12.0 %), bornyl acetate (10.2 %) | | England | + | (Perry et al., 2002) |
| α-pinene (6.7-23.2 %), β-pinene (3.8-19.2 %), limonene (0.8-16.6 %), 1,8-cineole (6.4-34.5 %), camphor (0.0-15.4 %) | | Spain\* | +/- | (Herraiz-Peñalver et al., 2010) |
| β-pinene (9.0-11.7 %), 1,8-cineole (13.5-31.9 %), camphor (14.4-23.9 %), *d*-terpineol (7.2-12.0 %), ledol (8.1-10.8 %) | | Spain | + | (Porres-Martínez et al., 2013) |
| 1,8-cineole (5.7-62.7 %), camphor (0.8-28.7 %), β-caryophyllene (0.6-24.0 %), limonen (2.2-25.2 %) | | Spain\* | +/- | (Usano-Alemany et al., 2014) |
| β-pinene (7.5-10.9 %), α-pinene (9.8-11.8 %), 1,8-cineole (25.2-31.3 %), camphor (11.0-15.6 %), | | Spain\*\*\* | +/- | (Porres-Martínez et al., 2014) |
| camphene (1.0-10.0 %), β-pinene (5.1-19.8 %), 1,8-cineole (6.2-33.7 %), camphor (2.8-22.4 %), | | Spain\*\*\* | +/- | (Méndez-Tovar et al., 2016) |
| 1,8-cineole (47.0 %), camphor (12.6 %) | | Hungary | - | (Máthé et al., 2010) |
| *Salvia fruticosa* | | | | |
| 1,8-cineole (22.5-37.5 %), viridiflorol (7.2-37.6 %), 13-*epi*-manool (4.6-25.7 %), β-caryophyllene (0.3-13.0 %), α-humulene (4.7-10.2 %) | | *in vitro* plant culture (Greece) | n/a | (Karioti et al., 2003) |
| 1,8-cineole (4.0-67.5 %), camphor (5.7-44.5 %), β-caryophyllene (1.4-23.0 %) | | Cyprus\* | n/a | (Bellomaria et al., 1992) |
| 1,8-cineole (42.0-74.4 %), camphor (0.9-25.6 %), β-caryophyllene (1.3-13.2 %), β-pinene (1.2-11.6 %) | | Austria\*\* | n/a | (Länger et al., 1996) |
| 1,8-cineole (22.7-64.2 %), camphor (0.9-30.3 %), α-thujone (1.5-19.2 %), β-thujone (1.3-25.6 %) | | Greece\*, \*\*\* | n/a | (Karousou et al., 1998) |
| camphor (22.6-23.1 %), α-pinene (8.7-12.7 %), borneol (0-12.6 %), 1,8-cineole (6.9-31.4 %) | | Greece | n/a | (Koliopoulos et al., 2010) |
| 1,8-cineole (44.7-58.4 %), β-pinene (5.8-14.1 %), camphor (1.3-14.9 %) | | Greece\*\*\* | n/a | (Sarrou et al., 2016) |
| camphor (26.0 %), α-thujone (21.4 %), 1,8-cineole (16.9 %) | | Hungary | n/a | (Máthé et al., 2010) |

\* Different locations; \*\* different isolations, \*\*\* different phenological stages; + essential oil composition is within the ISO standard range; - essential oil composition is not within the ISO standard range; +/- some of the samples from the study are failing into ISO standard range, and some of them are not; n/a not applicable.

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