



Melissa officinalis L.

LAMIACEAE

Rainer W. Bussmann, Ketevan Batsatsashvili, Zaal Kikvidze,
Narel Y. Paniagua-Zambrana, Manana Khutsishvili, Inesa Maisaia,
Shalva Sikharulidze, and David Tchelidze

Synonyms

Melissa officinalis L.: *Melissa bicornis* Klokov

Local Names

Georgian, ბარამბო (barambo), კამპლაბალახი (k'amp'labalakhi), კამპლის ბალახი (k'amp'lis balakhi) (Grossheim 1952; Ketskhoveli et al. 1971–2011; Makashvili 1991); **English**, Lemon balm

R. W. Bussmann (✉)

Department of Ethnobotany, Institute of Botany and Bakuriani Alpine Botanical Garden, Ilia State University, Tbilisi, Georgia

Saving Knowledge, La Paz, Bolivia

e-mail: rainer.bussmann@iliauni.edu.ge; rbussmann@gmail.com

K. Batsatsashvili · M. Khutsishvili · I. Maisaia · S. Sikharulidze · D. Tchelidze

Department of Ethnobotany, Institute of Botany and Bakuriani Alpine Botanical Garden, Ilia State University, Tbilisi, Georgia

e-mail: ketevan_batt@yahoo.com; ketevan_batsatsashvili@iliauni.edu.ge; mananakhuts@yahoo.com; Inesa.Maisaia@gmail.com; bakurianigarden@yahoo.com; nickibakanidze@yahoo.de

Z. Kikvidze

4-D Research Institute, Ilia State University, Tbilisi, Georgia

e-mail: zaal.kikvidze@iliauni.edu.ge

N. Y. Paniagua-Zambrana

Department of Ethnobotany, Institute of Botany and Bakuriani Alpine Botanical Garden, Ilia State University, Tbilisi, Georgia

Saving Knowledge, La Paz, Bolivia

Herbario Nacionál de Bolivia, Universidad Mayor de San Andrés, La Paz, Bolivia

e-mail: nyaroslava@yahoo.es

Botany and Ecology

Perennial, 30–125 cm high, with soft short hairs all over; stems erect, branched, quadrangular; leaves petiolate, ovate, to 6 cm long, 3 cm broad, the upper cuneate, the lower cordate at base, crenate-toothed, subglabrous, sometimes with glandular hairs or punctate glands beneath; verticillate 3–5–10-flowered, distant, in the axils of upper leaves; bracts elliptical or oblong, petiolate, not exceeding the flowers; calyx campanulate, hairy, the upper lip broad, flat, subemarginate, with three short acuminate teeth, the two lower teeth triangular-lanceolate; fruiting calyx five-angled; corolla whitish or pinkish, 13–15 mm long, one and a half times to twice as long as calyx, glabrate; upper lip almost flat; stamens four, the lower longer, curved and connivent under the upper lip; nutlets ovoid, strongly narrowed toward base, brownish, smooth, 1.5–2 mm long. Flowering June–September. Ural, Caucasus, Middle Asia, forest fringes, in wet shady ravines, near settlements, as weed, up to the middle mountain belt (Shishkin and Borisova 1954; Figs. 1 and 2).

Fig. 1 *Melissa officinalis* (Lamiaceae), garden, Chicani, Bolivia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



Fig. 2 *Melissa officinalis* (Lamiaceae), garden, Chicani, Bolivia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



Phytochemistry

Essential oils (geranial, citronellal, caryophyllene, limonene, linalool, linaloolene, rosene, isogeranial, pulegol, isopulegol, methyl salicylate, safranal, terpineol, lavandulyl valerate, farnesene, linalyl acetate, fellandrene), vitamins (C, B₁, B₂, carotene), phenylcarboxylic acids (rosemary, coffee, chlorogenic, protocatechol, ferulic), flavonoids (luteoline, ramranazine), coumarins, triterpenoids (ursolic acid), fatty acids (palmitic, stearic, oleic, linoleic, linolenic) (Sokolov 1991).

Local Medicinal Uses

Widely used in Eurasia and included in official pharmacopoeia. In Middle Asia used as leaf decoction for neuralgia, heart failure, bronchitis, digestive disorders, diarrhea, hemostasis, tracheobronchitis, otitis, arthritis, pharyngitis, migraines, insomnia, gynecological diseases, gout, dizziness, and anemia, as sedative, and as galactogogue. As bath and compresses for rheumatism, bruises, burns, furunculosis, and oral rinse for paradontosis (Sokolov 1991).

The leaves and shoots are used to make a calming tea for nervous problems (Bussmann et al. 2016, 2017, 2018; Bussmann 2017).

Local Food Uses

The leaves are used to flavor beverages. Sometimes used as a spicy seasoning for food, in pepper vodka and absinthe, in Benedictine and Chartreuse liquors (Grossheim 1952; Sokolov 1991).

Local Handicraft and Other Uses

The essential oils are used for perfumes. It is an excellent honey plant (Grossheim 1952; Sokolov 1991).

References

- Bussmann RW, editor. Ethnobotany of the Caucasus. Cham: Springer International Publishing; 2017, XXVII, 746p. (ISBN 978-3-319-49411-1).
- Bussmann RW, Paniagua Zambrana NY, Sikharulidze S, Kikvidze Z, Kikodze D, Tchelidze D, Khutishvili M, Batsatsashvili K, Hart RE. A comparative ethnobotany of Khevsureti, Samtskhe-Javakheti, Tusheti, Svaneti, and Racha-Lechkhumi, Republic of Georgia (Sakartvelo), Caucasus. *J Ethnobiol Ethnomed*. 2016;12:43. <https://doi.org/10.1186/s13002-016-0110-2>.
- Bussmann RW, Paniagua Zambrana NY, Sikharulidze S, Kikvidze Z, Kikodze D, Tchelidze D, Batsatsashvili K, Hart RE. Ethnobotany of Samtskhe-Javakheti, Sakartvelo (Republic of Georgia), Caucasus. *Indian J Tradit Knowl*. 2017;16(1):7–24.
- Bussmann RW, Paniagua Zambrana NY, Sikharulidze S, Kikvidze Z, Kikodze D, Tchelidze D, Batsatsashvili K, Hart RE. Unequal brothers – plant and fungal use in Guria and Racha, Sakartvelo (Republic of Georgia), Caucasus. *Indian J Tradit Knowl*. 2018;17(1):7–33.
- Grossheim AA. Plant richness of the Caucasus. Moscow: Russian Academy of Sciences; 1952. (in Russian).
- Ketskhoveli N, Kharadze A, Gagnidze R. Flora of Georgia, 16 vols. Tbilisi: Metsniereba; 1971–2011. (in Georgian).
- Makashvili A. Botanical dictionary. Tbilisi: Metsniereba; 1991. (in Georgian).
- Shishkin BK, Borisova AG. Flora of the USSR, Volume 21: Labiateae. Leningrad: Akademia Nauk; 1954 (English 1976). 520 pages, 32 b/w plates, 2 maps.
- Sokolov PD, editor. Plant resources of the USSR: flowering plants, their chemical composition, use; Volume 6. Families Hippuridaceae-Lobeliaceae. Leningrad: Akademia Nauk; 1991, 200 p. (in Russian).