

MINT NOTES

By R. A. GRAHAM.

II. MENTHA GRACILIS SOLE, AND ITS RELATIONSHIP TO MENTHA CARDIACA BAKER.

×*MENTHA GENTILIS* L., 1753, *Sp. Plant.*, 577.

Verticillate mints, with campanulate glabrous glandular calyx-tubes, hairy calyx-teeth, and glabrous pedicels.

1. Subhybr. † *gentilis*. Leaves broadly ovate-lanceolate.
2. Subhybr. *gracilis*. Leaves narrowly ovate-lanceolate.

×*M. gentilis* has been considered to be *M. arvensis* × *M. spicata*, and *M. gracilis* to have arisen from the same two parents, Fraser denoting it as *M. arvensis* × *M. gentilis*. It is probable that the relationship between ×*M. gentilis* and ×*M. gracilis* is close, but owing to the fact that the cytology of the two is as yet unknown, and due to the usually-marked difference in outward appearance arising from the difference in leaf shape, it is advisable to keep the two groups temporarily differentiated as subdivisions of the hybrid group *M. gentilis*.

1. Subhybr. † *GENTILIS* (L.) R. A. Graham, comb. nov. This group is not the subject of this paper, and will be dealt with on a subsequent occasion.

2. Subhybr. *GRACILIS* (Sole) R. A. Graham, comb. nov.

Var. a. *GRACILIS* (Sole) Fraser.

M. gracilis Sole, 1798, *Menthae Britannicae*, 37; Hull, 1799, *British Flora*, 129.

M. gracilis a Smith, 1800, *Trans. Linn. Soc.*, 5, 210.

M. cardiaca Baker var. 2 *M. gracilis* "Sole, t. 16, non Brown," Baker, 1865, *J. Bot.*, 3, 246.

×*M. gentilis* L. var. *gracilis* (Sole) Fraser, 1927, *B.E.C. 1926 Rep.*, 241. [Fraser is in error in attributing the first use of the epithet to Smith.]

The three essentially identical specimens, which I have accepted as type material, are among Sole's set of mints at the Linnean Society. These should be consulted together with Sole's text in *Menthae Britannicae*.

Sole's typical *M. gracilis* is a greenish, rather slender, leafy mint, with few, rather short, mainly barren branches. *Stem* greenish-purple,

†As there appears to be no satisfactory term in current use for well-marked subdivisions of a hybrid analogous to subspecies, the Publications Committee has suggested the use of the term *subhybrid*.—Ed.

hairy above but very thinly so below. *Leaves* narrowly ovate-lanceolate, broadest rather below the middle, tapering to each end, and on footstalks up to 6 mm. long; thinly hairy throughout but with more hairs on the whitish veins of the subsurface; lamina up to 4.8 × 1.7 cm.; serratures shallow but rather sharp, irregular in depth and spacing, up to 11 on each edge. *Bracts* (also known as bract—or floral—leaves) similar to the leaves, gradually but in mature plants not greatly decreasing in size upwards. *Calyx* similar to ×*M. gentilis* L., campanulate, glabrous, glandular, the teeth ciliate with white hairs. *Pedicels* purple, glabrous. *Inflorescence* leafy, of 11 to 13 rather few-flowered verticils which are almost entirely confined to the main stem, the lowest pedunculate. Not having seen fresh material I am unable to comment on the scent. This is evidently a very rare mint.

Var. b. *CARDIACA* (Baker) Briquet.

M. cardiaca Baker, 1865, *J. Bot.*, **3**, 245.

M. gentilis Sole, 1798, *Menthae Britannicae*, 36 [non L.].

M. gracilis γ Smith, 1800, *Trans. Linn. Soc.*, **5**, 211.

×*M. gentilis* var. *cardiaca* Briquet; Fraser, 1927, *B.E.C.*
1926 Rep., 241.

Baker's type specimen (1865), which is a poor and decapitated plant, is at the British Museum. With it is another sheet bearing two excellent specimens from cultivation at Kew in the following year. We are not told whence the type came, but it seems at least likely that the Kew specimens were obtained from cultivation of type material. These latter are different from type in growth form, and in order to understand *cardiaca* it is necessary to consider them as well as the type.

Baker's description is generally excellent. I find, however, that the stem is almost glabrous above, and with a few scattered hairs below; the leaves are broadest rather below the middle, and taper to both ends with an entire base, and whereas the lower leaves are on footstalks up to 3 mm. long the upper bracts are almost sessile. The upper surface bears a few hairs on the veins while on the undersurface there are rather more hairs on the veins and scattered generally over the surface. Fortunately the specimen was figured, so that it is possible to know the form of the inflorescence which, being decapitated, would otherwise have remained in doubt. Like *gracilis* it is leafy, the uppermost measurable bract being 1.3 cm. long.

Type *cardiaca* differs from *gracilis* in that the stem is far less hairy; the leaves and bracts are on shorter stalks or sessile, and the whole plant is evidently less slender. It is also likely that in *cardiaca* there are more verticils, each with a greater number of flowers than in *gracilis*. But the two have considerable resemblance, and identification will doubtless present difficulty to the inexperienced, especially in view of variation in characters. It is likely that many gatherings will be found to be intermediates between the two, and Baker's statement that *gracilis* may be a weak form of *cardiaca* is probably true.

The two cultivated specimens are similar to type in most essentials, but the form of the plant is very different. Owing, perhaps, to conditions, the inflorescence of these is markedly subspicate, and this appearance is caused by the many verticils being crowded towards the apices of the many branches, and to the great reduction in size of the bracts upwards. These become as short as 8 mm. in length, thus giving a non-leafy appearance to the whole inflorescence. This form of *cardiaca*, which is Sole's *M. gentilis*, is easily told from *gracilis*, which, being a weaker plant, would, I think, be unlikely to vary to a markedly subspicate form.

The type, as shown in the specimen and figure, is more general than the subspicate form, though *cardiaca* cannot be regarded as a common mint. Being extensively cultivated in gardens it is, so far as I know, always an outcast, and is therefore to be met with wherever gardens are near.

In Sole's set of mints at the Linnean Society there is a closely allied specimen called *M. glabra* (the name is invalid, being antedated by *M. glabra* Miller, a form of *M. spicata* L. em. Huds.), which is an intermediate between *gracilis* and *cardiaca*. The lower leaves are on stalks of considerable length, while the upper bracts are almost sessile; the stem is glabrous; and the inflorescence leafy. In addition the calyx teeth are far less hairy than either *gracilis* or *cardiaca*. The affinity is nearer to *cardiaca*, though the long stalks of the lower leaves are a character of *gracilis*. It is rather surprising that Sole did not recognise this mint as being related to the *gracilis* group, indeed he thought it to be a form of his *M. praecox*, which, as we now regard it, is a variety of *M. arvensis* L.

III. A VARIETY NEW TO THE BRITISH LIST.

MENTHA LONGIFOLIA (L.) Huds. var. *HORRIDULA* Briquet. Judging from Briquet's (1891, *Labiées des Alpes Maritimes*, 50) description, and especially from his specimens in the Conservatoire at Geneva, this would appear to be the mint which Fraser in his Monograph (1927, *B.E.C. 1926 Rep.*, 222) called "*×Mentha Nouletiana* Timb.-Lagr.?" It is clear that Fraser was rather dubious about the name, as his question-mark indicates, and the Antrim specimen from which he took his description is now known not to be Timbal-Lagrave's mint, but corresponds well to Briquet's var. *horridula* of *M. longifolia*. It is not an uncommon mint in Britain, being frequently a garden outcast. Indeed, Still called it the "common horse-mint." Different gatherings show some variation in degree of hairiness, but the very salient serratures provide a character whereby it is easily identified. There is one interesting difference between British material and the Geneva specimens. Whereas in the former the stamens seem always to be included, in the latter they are included in some specimens and exserted in others.

Additional notes on this mint are to be found in *B.E.C. Report for 1926* (p. 271) and for 1935 (p. 183).