

GERANIUM MICROPHYLLUM HOOK. F. AS AN ADVENTIVE

PLANT IN BRITAIN

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Among a number of gatherings, principally of adventives, passed to me for determination in late 1960 by Miss M. McCallum Webster, was found good material of *Geranium microphyllum* Hook. f., a native of south-west Australia, Tasmania and New Zealand. It occurred on a railway embankment at Bordon station, N. Hants., (v.c. 12) and was apparently well established in company with *Berteroa incana* (L.) DC. In view of its very close similarity to certain native British cranesbills of the section *Columbina* Koch, it seems advisable to give a short account of the plant. It is a perennial, successfully ripens seed in this country, and the ejaculatory means of seed dispersal has already proved a very successful one in distributing alien plants in Britain (cf. *Impatiens* spp.). The rapidity with which *G. molle* L. and *G. dissectum* L. colonise a bare gravel pit demonstrates what may possibly be expected of *G. microphyllum* with the additional aid of the railway.

As has been observed, *G. microphyllum* might very easily be passed over in a field for some British annual cranesbills, notably *G. dissectum* L., to which it bears close resemblance in its deeply dissected leaves and hairy carpels. In view of the fact that few botanists seem to find the length of the sepal mucro a wholly convincing character, the average botanist collecting the plant and attempting to name it from Clapham, Tutin & Warburg (1952) on key characters would probably be torn between *G. dissectum* L. and *G. pusillum* L. From both of these species it may readily and constantly be distinguished by the sculpturing of the testa of the seed. In *G. pusillum* the seed is quite smooth, and in *G. dissectum* it is furnished with deep and very pronounced hexagonal areolae, giving a perfect honeycomb effect; but in *G. microphyllum* the sculpturing is very much less distinct than in the case of the latter species, needing a magnification of at least $\times 15$ to make it out at all satisfactorily with regard to detail. The areolae are irregularly rectangular or rhomboidal, becoming most elongated towards the centre of the seed, where they strongly recall the cell shape of certain hypnoid mosses.

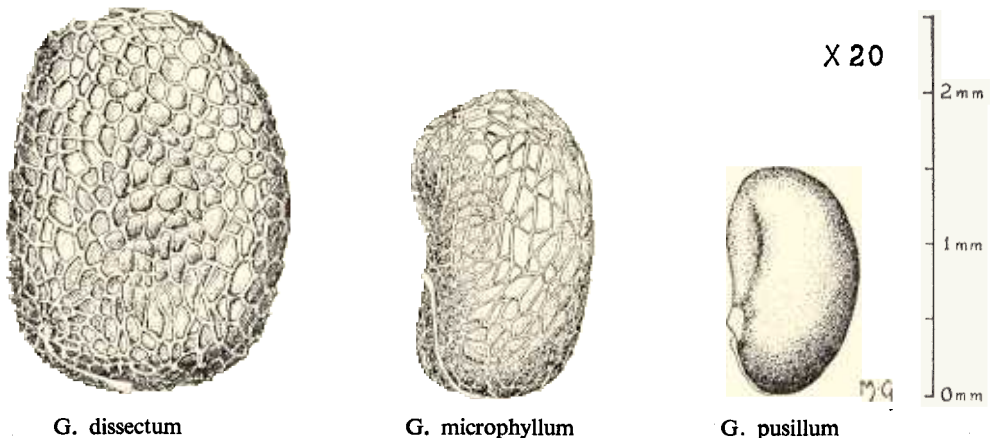


Fig. 1.

From the figures of the seeds (Fig. 1), for which I am indebted to my colleague Miss M. A. Grierson, it will be seen that there is also considerable difference in the sizes of the seeds of the three species, those of *G. microphyllum* falling between those of the other two in this respect.

G. microphyllum was no doubt introduced at Bordon with wool shoddy, as this material is handled in the nearby siding, where Miss Webster also found *Pelargonium inodorum* Willd., *Lupinus angustifolius* L. and *Nicotiana suaveolens* Lehm., these as casuals. It should be sought for on railway banks in the vicinity of other stations known to handle shoddy.

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