

The *Tetramorium caespitum* habitat differs much less from that of *Formica fusca* than the *F. fusca* does from *Lasius niger*. It is a little higher up than *Formica fusca* in rather drier and perhaps a slightly warmer area. But the main difference is in the extent of the vegetation cover which only amounts to 0.62. Also the grasses are still less frequent (0.15 of vegetation), though again about equally represented. Most characteristic perhaps is the fact that *Erica cinerea* is at its maximum and nearly as common as *Calluna vulgaris* (whereas *Erica tetralix* is absent). *Ulex minor* though slightly less frequent than in *Formica fusca* areas is the single best represented plant species.

*Lasius alienus* lives in rather drier and less organic soil than *Tetramorium caespitum* but hardly any higher and no warmer. There is even less vegetation—about half is bare soil—and the grasses are almost absent but the proportions of the other main plants are much the same.

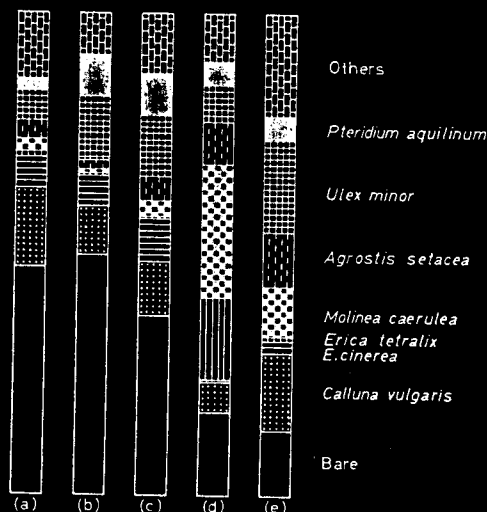


FIG. 1. The proportions bare and variously vegetated in the areas inhabited by ants and not. (a) No ants; (b) *Lasius alienus*; (c) *Tetramorium caespitum*; (d) *Lasius niger*; (e) *Formica fusca*.

Ant-free areas are quite high in the *T. caespitum*–*Lasius alienus* zone, but are almost as cold as the wet bog in June. They are moister than the *L. alienus* areas but resemble them in that about half the ground is bare. In the vegetation *Calluna vulgaris* predominates (about 0.5) and it is as common as in *Formica fusca* areas. Also outstanding is the scarcity of *Ulex minor*, less than in any other area and notably less than in the *Lasius alienus* habitat which this region resembles most in other respects: in fact it is almost true to say that the ant-free areas are *Lasius alienus* habitat in which *Ulex minor* is largely replaced by *Calluna vulgaris* and the two grasses. These unoccupied areas then are not spaces between nests and probably not places yet to be colonized, but are unsuitable on account of their cool micro-climate and lack of *Ulex minor* (an important legume which carries a rich aphid population and harbours many other insects).

*Myrmica sabuleti*, represented at three stations close together, lives in a slightly drier soil than *Formica fusca* with about a quarter of the soil exposed. The two grasses *Molinia caerulea* and *Agrostis setacea* (in proportion 1 : 2) are the main plants. The abundance of *A. setacea* is the outstanding feature.