of vaulted chambers like those in which the repletes hang, whereas soft or friable soil would be most disadvantageous. The development of repletes also makes it necessary for the ants to seek very dry situations for their nests. Hence we always find them, in the environs of Manitou at least, on the summits of ridges which shed the rain very rapidly. The honey chambers must be kept very dry both to prevent the disastrous results of crumbling and slipping walls and to obviate the growth of moulds on the repletes, which are, of course, imprisoned for life in dark cavities and filled

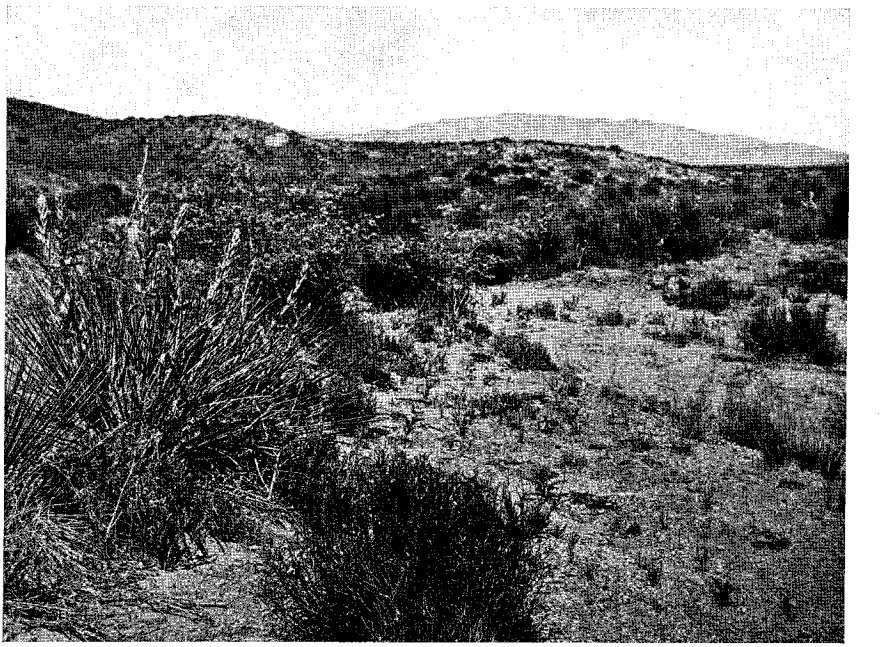

Fig. 24. Desert near Albuquerque, New Mexico; home of *Myrmecocystus mexicanus navajo* subsp. nov.

with substances that readily favor the development of fungi. I believe also that the size of the nest openings and galleries, which are so much larger than would seem to be required by such small, slender ants, may be an adaptation to securing plenty of fresh air in the honey chambers. If these suppositions are correct there is obviously a reciprocal relation between the replete habit and an arid environment: the ants store honey because they are living in an arid region where moisture and food are precious and the storing of honey in replete workers, in turn, is possible only in very dry soil.