incorporation into his series of papers on Arizona ants, very graciously supplied me with his typescript and his opinions. Without these data at hand I could certainly not prepare as full a report of the range and habits of *sancti-hyacinthi* as I am now able to write. Furthermore, Dr. Creighton sent to me long series of specimens of *sancti-hyacinthi*, including a number of as yet undescribed males. My New Mexico collections have fortunately supplied me with two alate females and a single nest queen—a caste which also has been undescribed. Descriptions of these sexual forms will be presented later in this paper.

The nests of *sancti-hyacinthi* are obscure affairs. As a rule there is no sort of superstructure to mark a colony. The nests which I located in New Mexico during August and September consisted of an entrance hole with a scattering, circlet or semicirclet of shallow to deep chaff. Only this chaff, which Creighton has noted as being absent earlier in the season, makes the nests readily detectable. The colonies which I examined were small (40-60 workers) and inhabited very stony soil in xeric habitats. Such small populations seem to be the rule for *sancti-hyacinthi*. A colony comprising one hundred workers would certainly be a large one. I can do no better than to quote from Creighton's typescript the following passage concerning Creighton's observations of nest structure which agree well with mine.

> The nest usually consists of one or two shallow, crooked passages about six or seven feet long. At intervals, often under a stone, these passages widen into chambers in which brood and seeds are kept. The ants seem frequently to build their nests in comparatively thin sheets of gravel which overlie rocky ledges. This often makes it possible to excavate the whole area down to bed rock with comparative ease. Several colonies were treated in this fashion. In three instances the writer feels certain that every individual in the nest was secured. It was, therefore, something of a surprise to find no female in these three nests. Two of them contained workers only. The third, taken on July 9, contained fourteen males and an ergatogyne with rudimentary wings and a greatly enlarged gaster. The writer has no doubt that this ergatoyne was the functional female of the colony. It also seems safe to infer that in many cases the true female is replaced in the nests by an egg-laying worker.

Both Creighton and I observed the unusual docility of *sancti-hyacinthi* workers in the field. Unlike most other members of the genus which are renowned for their innate ferocity, *sancti-hyacinthi* rarely bites and can be made to sting only after continuous prodding. Creighton says that the sting is much less painful than that of *barbatus*. I have been stung frequently by the latter species and can imagine no worse an antagonist in the genus. According to Creighton the pain is largely localized in the area of the puncture. This area becomes inflamed and itches for two or three days afterward. About the only belligerent action which *sancti-hyacinthi* displays is the response which occurs when a worker is suddenly surprised by an intruder. Under such a circumstance the worker rears on its hind legs, turns the abdomen forward and upward and thrusts up its jaws as far as possible. The significance of this response, which can be elicited from several species of *Pogonomyrmex,* is not clear to Creighton; nor can I explain it. The response resembles to a startling degree the action of