

At 5:10 p.m., 2 *Tenebrionid* larvae, 1 treated with oleic acid and the other untreated, were placed outside the nest entrance. At 5:13 p.m. the untreated larva was carried into the nest, and 1 minute later the treated larva also was seized and carried in. At 5:30 p.m., however, the treated larva was brought out, carried to a distance of 34", and discarded. The untreated larva was retained within the nest and shortly consumed.

These trials gave strong evidence that patterns both of burying and of rejection of objects impregnated with oleic acid are exhibited by *M. vindex*. It then seemed of interest to compare the reactions to oleic acid with those of other substances tested by Wilson *et al.* in their work with *P. badius*.

Reactions of workers of *Myrmecia vindex* to Methyl  
benzylamine; Caproic acid; Oleic acid; Formic acid

Using the same colony and with the same experimental arrangements as above, 14 cocoons, ranging from freshly spun to nearly ready to eclose, were impregnated as follows:

Methylbenzylamine (3 drops)	3 cocoons
Caproic acid (3 drops)	3 cocoons
Oleic acid (3 drops)	3 cocoons
Formic acid	3 cocoons

2 cocoons were retained as controls.

All these cocoons were placed on cardboards, and mounted on top of the Lubbock nest as before, at 2:04 p.m.

At 2:19 p.m. the 2 controls and the 3 cocoons treated with formic acid had been permanently returned to the nest. At 5:40 p.m., 1 cocoon from the caproic acid group had been removed 40.5" from the nest and deposited on a refuse midden. All other cocoons remained untouched.

At 8:45 a.m. on March 31, no further cocoons had been removed from the cardboards, but a few grains of earth had been deposited on the cardboards of the caproic- and oleic-acid treated objects. During the night the caproic-treated cocoon deposited on the refuse midden had been retrieved into the nest, but at 8:55 a.m. it was again brought out and carried to the midden, 44" from the nest entrance. Almost immediately it was again retrieved and returned to the nest. At 9:10 a.m., it was once more removed and dropped about 9" from the nest entrance. By 2:03 p.m. this cocoon had been carried to a midden 36" from the entrance, but 1 minute later