I NCREASED numbers of nodulated plants have been observed for cowpea and alfalfa following seed with the organic fungicides, Arasan and Phygon. In work with peas, Spergon was shown to be compatible with seed inoculation with legume bacteria. The interval between inoculation and planting was two hours or less (3). Other studies have demonstrated compatibility of Arasan, Phygon, and Spergon with bacteria associated with cowpea, soybean, and alfalfa fields requiring inoculation (1, 3, 4). However, species of *Rhizobium* have been reported to have tolerance to these chemicals, and also the conditions of planting, especially the moisture content of the soil, have a bearing on their compatibility (5).

Subterranean clover (*Trifolium subterraneum* L.) is an important legume used for seeding California rangelands, and often responds to rhizobial inoculation (6). Hence, field experiments were initiated to study the compatibility of *Arasan*, Phygon, and Spergon with the nodule bacteria associated with *Trifolium subterraneum* and other legumes. Various tests were performed on a field site where successful inoculation was known to be essential to the survival of subterranean clover seedlings.1

**First experiment**—Mt. Barker subclover was field-sown on October 19, 1955, in moist Colma fine sandy loam. A split plot design was used with four replications. Main plot treatments consisted of types of inoculum: soil from fields supporting a vigorous stand of subterranean clover, commercial clover-alfalfa inoculum, soil inoculum, and no inoculum. The soil inoculum was applied at the rate of 400 pounds per acre. Antiseptic precautions were taken during inoculation and planting to avoid contamination between inoculum treatments. There was no contamination between inoculum treatments.

**RESULTS**

Inoculation treatments based on soil from fields supporting vigorous stands of subterranean clover were statistically significant at the 5% level or better, except as noted. Standardized differences discussed were significant at the 5% level or better, except as noted.

**CONCLUSIONS**

A stand count on January 5, 1956, indicated a uniformly good emergence averaging 53% of the seed sown (table 1). There were no significant differences in stand among treatments. However, the number of nodulated plants per plant was significantly different among treatments. Inoculation treatments based on soil from fields supporting a vigorous stand of subterranean clover were significantly greater than the other treatments. Hence, field experiments were initiated to study the compatibility of *Rhizobium* with the different types of inoculum containing *Rhizobium* species. A variety of commercially-available organic fungicides and seed-applied fungicides and seed-inoculated legume inoculum observed on field-grown subterranean clover.