In a previous article by the authors data were presented showing the effect of various fertilizer treatments on the growth and development of coniferous seedlings. The pitch pine (Pinus rigida M.) field plats, on which these data were obtained, were carried over for 2 additional years, and the data presented in Table 1 give growth values on these 4-year-old seedlings.

Dried blood at the rate of 400 pounds per acre produced the largest seedlings at both 2 and 4 years. At both ages the seedlings responded to increased amounts of dried blood (D. B.), ammonium sulfate (N ams), nitrate of soda (Na), muriate of potash (K₂O), and superphosphate (P). Where mixed fertilizers were used, the change in growth rate was more pronounced and less consistent. In the Na-K beds the response was much greater at the end of the fourth year, though the average weight of the seedlings was much less than those of the check plats.

Plat 19 moved up from 21st place at the end of 2 years to 3rd place in 4 years; plat 20 from 20th place to 7th; and plat 21 from 17th to 10th place. These plats showed the greatest response at the end of the fourth growing season.

Plat 3 treated with nitrate of soda at the rate of 200 pounds per acre showed the greatest decrease in growth dropping from fourth place at the end of the second year to 12th place in the fourth year. Nine plats maintained approximately their same relative ranking, gaining or losing only one place based on the average weight of samples of the 2- and 4-year-old seedlings.

The four check plats moved from 19th to 16th place. Thus, 9 plats at the end of the second year showed increased growth over the check plats, and at the end of the fourth year 11 plats exceeded the check plats.

At the end of this 4-year period, the plats were destroyed and composite soil samples were taken. These samples were screened.

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