Consumption of peanuts (Arachis hypogaea L.) as a national food source continues to increase. The need for food consumption will increase the need for food plant seeds. The need for peanuts every year is still not met. Fertilization is an activity to add nutrients in the soil so that the nutrients needed by plants are met. The more dependence on fertilizers, especially chemicals, causes the soil in paddy fields to experience nutrient degradation, especially potassium which causes the soil to become acidic. SP-36 fertilizer functions as a supporting nutrient for the formation of pods and Agricultural Lime (tohor) serves to increase potassium nutrients to improve soil properties and soil pH. The purpose of this study was to determine the effect of adding SP-36 fertilizer and Agricultural Lime (tohor) to the yield and quality of peanut seeds. The method used is a factorial randomized block design (RAK) consisting of two factors, namely the addition of SP-36 (P) with 3 levels, namely without treatment/control (P0), a dose of 120 kg/ha (P1), a dose of 180 kg/ha (P2) and Agricultural Lime (tohor) with 3 levels, namely without addition/control (C0), a dose of 100 kg/ha (C1), a dose of 150 kg/ha (C2). The results showed that the SP-36 treatment had a very significant effect on the number of pods per plant, wet weight of pods, dry weight of pods, dry seed weight, and pithy seed weight. The treatment of giving agricultural lime gave no significant effect on all observation parameters. The interaction of SP-36 treatment with agricultural lime showed no significant effect.

**Key words**: Agricultural Lime, Peanuts, SP-36