

6. Seedling growth in experimental plots.

It has long been observed, especially in experimental fields where the practice is most common, that the extra seed dropped at the end of a plot usually shows a more perceptible early growth than the attended units of the plot. An experiment was conducted at the Conn. Agr. Exp. Sta. in 1952 to ascertain the reality of this "extra" growth. A Latin Sq. design (n=13) was employed, plots consisting of a single seed, and 2, 4, 8, 16, 32 and 64 seeds clumped and equally spaced in a 4 inch sq. area respectively. Three measurements were taken on every plant harvest 28 days after planting -- height, stem diameter and green weight -- and plot averages were used in the Analysis of Variance. The tables are presented below.

ANOVA height of plant: (measured to nearest 1/4")

Source	df	SS	MS	F
Treatments	12	73.448	6.120	.922
Columns	12	151.856		
Rows	12	140.056		
Residual	132	876.317	6.638	
Total	168	1241.677		

ANOVA stem diameter: (measured to nearest mm.)

Treatments	12	592.768	49.397	49.207**
Columns	12	27.440		
Rows	12	20.386		
Residual	132	132.509	1.004	
Total	168	773.103		

ANOVA green weight: (measured to nearest gm.)

Treatments	12	7122.248	593.521	8.20**
Columns	12	680.360		
Rows	12	487.949		
Residual	132	9551.736	72.361	
Total	168	17842.293		

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