

Seed X Media Interaction Test 2004.

Bob Pearce and Jack Zeleznik

Seed lots of Tn 90 and 14 x L8 were obtained from each of the four tobacco seed companies active in Kentucky. Float trays (288 cell) were filled with either Speedling Peat-Lite or Scotts with Coir soilless mix using a Berry automatic tray filler. Seed from each seed lot were sown with a vacuum seeder into four trays (replications) of each brand of media. The trays were randomized and floated in a common float bed in a typical poly covered greenhouse. Temperatures were maintained in the range of 68 to 82 degrees F. Germination and spiral root counts were made 12 days after seeding. The data below show that spiral root is a complex problem involving both media and seed factors. If you have questions concerning this data please contact Bob Pearce at rpearce@uky.edu

Percent germination of tobacco seeds counted 19 days after seeding.

Seed Source/Variety	Scotts with COIR	Speedling Peat-lite	Source Avg.
Clays TN 90	93.6	92.3	92.9
Clays 14 x L8	92.3	91.7	92.0
Newton TN 90	94.7	95.4	95.1
Newton 14 x L8	89.9	87.8	88.9
Rickard TN 90	97.2	97.0	97.1
Rickard 14 x L8	97.6	96.1	96.8
Workman TN 90	95.6	93.1	94.3
Workman 14 x L8	92.8	93.1	93.0
Media Avg.	94.2	93.3	

No statistically significant interaction was found.

LSD 0.05 for the seed avg. was 1.7.

LSD 0.05 for the media avg. was 0.9.

Percent of germinated seedlings exhibiting symptoms of spiral root at 19 days after seeding.

Seed Source/Variety	Scotts with COIR	Speedling Peat-lite	Source Avg.
Clays TN 90	8.3	5.5	6.9
Clays 14 x L8	14.1	9.8	11.9
Newton TN 90	5.8	0.3	3.0
Newton 14 x L8	11.8	2.4	7.1
Rickard TN 90	7.4	3.9	5.2
Rickard 14 x L8	21.1	6.7	13.9
Workman TN 90	5.2	1.3	3.2
Workman 14 x L8	16.5	3.2	9.9
Media Avg.	11.3	4.1	

Interaction between seed source and media was statistically significant.
 LSD 0.05 for treatment means = 2.5

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin.