

Results of the 2001 Tobacco Soilless Media Screen

Seventeen entries were tested in 2001, including old formulations of some media. All media were used directly from the bag without adding any water. Trays (242 cell) were filled mechanically with a Berry Seeder filler box. After adding media to the hopper the first two trays were discarded and the next four trays were kept for the test. Trays were seeded with Rickard TN90 pelleted tobacco seed (lot number RB90ZBZI-1) and floated in a randomized block design in a common float bay. Temperature was maintained between 68 and 82 F during germination. Dry cells , germination and spiral roots were counted 2 and 3 weeks after seeding.

Dry cells, Germination, and Spiral Roots **2 weeks** after seeding

Brand of Medium	Dry cells #/tray	Germination %	Spiral Root %
Burley Gold ^{\$}	242.0	0.0	0.0
Carolina Choice	0.3*	95.8*	13.0
Carolina Silver	0.3*	96.0*	12.2
Lamberts LM4 ^{\$}	242.0	0.0	0.0
Premier "New"	0.5*	95.5*	19.9
Premier "Old"	8.0	92.0*	18.9
Scotts Terra-Lite	0.0*	94.5*	17.7
Scotts Terra-Lite w COIR	3.25	90.3*	13.1
Scotts Fortified Ag-Mix	1.8*	87.8	7.1*
Southern States	0.0*	93.8*	17.3
Speedling Peat-Lite "New"	0.0*	94.0*	14.5
Speedling Peat-Lite "Old"	3.5	89.0*	15.3
Speedling Fortified "New"	1.0*	87.5	10.9*
Speedling Fortified "Old" ^{\$}	242.0	0.0	0.0
Speedling Peat Lite "Gold Bag"	0.3*	93.0*	13.2
Sunshine LT-3	3.5	90.2*	12.0
Sunshine LT-5	1.8*	95.7*	11.4*
LSD 0.05	2.5	7.6	4.5

\$ These media did not wick or wicked very slowly

Entries marked with a star are not significantly different from the best entry in the test.

Note: The Speedling Peat Lite “Old Style” did eventually wick so it is included in the three week count. Interestingly, it has one of the lowest incidences of spiral root.

Dry cells, Germination, and Spiral Roots **3 weeks** after seeding

Brand of Medium	Dry cells #/tray	Germination %	Spiral Root %
Burley Gold ^{\$}	242.0	0.0	--
Carolina Choice	0.0*	96.5*	14.2
Carolina Silver	0.0*	96.0*	13.4
Lamberts LM4 ^{\$}	242.0	0.0	--
Premier “New”	0.3*	95.9*	19.1
Premier “Old”	6.8	93.2*	16.7
Scotts Terra-Lite	0.0*	95.1*	13.8
Scotts Terra-Lite w COIR	2.0	91.8	11.4*
Scotts Fortified Ag-Mix	4.0	96.0*	7.4*
Southern States	0.0*	95.5*	17.5
Speedling Peat-Lite “New”	0.0*	95.1*	15.9
Speedling Peat-Lite “Old”	2.2	91.6	26.9
Speedling Fortified “New”	0.8*	94.3*	14.1
Speedling Fortified “Old” ^{\$}	1.0*	93.3*	7.9*
Speedling Peat Lite “Gold Bag”	0.0*	95.6*	16.1
Sunshine LT-3	2.2	92.8*	14.0
Sunshine LT-5	1.2*	96.5*	14.3
LSD 0.05	1.8	3.9	10.8

\$ These media did not wick or wicked very slowly

Entries marked with a star are not significantly different from the best entry in the test.

Test conducted by Dr. Bob Pearce, Extension Tobacco Specialist, and Jack Zeleznik, Senior Lab Technician, University of Kentucky.

Questions? rpearce@ca.uky.edu