

Vigor & Heat Stress Testing Services

VERSION 6.24

VEG VIGOR VISUAL REPORT

SoDak Labs has developed a rating system for small-seeded vegetable seed lots. We anticipate the visual report and vigor ranking value to be the most popular with seed dealers and their grower network. The Veg Vigor Index includes a photograph of 4 day old seedlings grown at 68°F, at a recorded Growing Degree Day (GDDs), and one of four heat stress regime tests. For the 4 day old seedlings, the root tissue development will be measured by digital image analysis, and totaled for all seedlings. The 68°F strong normals germination, total root length, and the heat stress regime strong normal % are used to calculate the Veg Vigor Index Ranking for the sample.

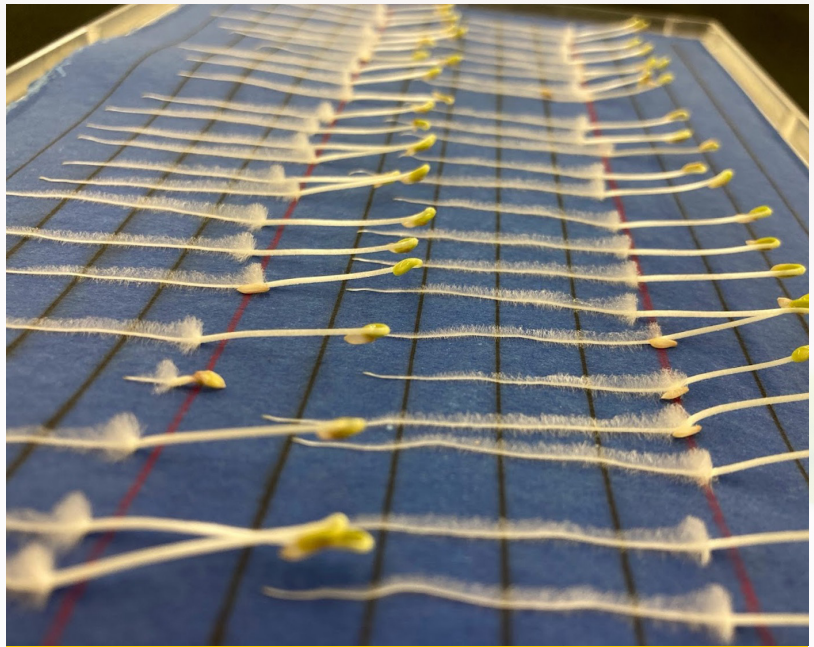


FIGURE 1. Lettuce seedling growth rate after 4 days at 68°F.

HEAT STRESS GERMINATION REGIMES:

SoDak Labs, Inc. is offering several heat stress germination regimes that emulate planting seeds into very warm soils in desert environments. We strive to emulate the warm soil imbibition temperature in our laboratory media so individual seed lots or individual cultivar reaction emulates the respective field soil water temperature. Certain cultivars may express seed dormancy due to the specific heat stress regime (seeds

imbibe water but express “thermal inhibition” and do not show radicle protrusion or growth until moved to a cooler regime). We offer four heat stress regime options: 1) 81°F, 2) 86°F, 3) 95°F and 4) an alternate temperature of 86–95°F. Evaluation responses include a 4 day early count (strong normal) and a 7 day final count. Please contact us on your specific needs.

VEG VIGOR INDEX RANKING:

VV Index of Seed Lot Suitability for Aug/Sept Desert Planting:

< 8.0 = unacceptable | 8.1-8.5 = marginal | 8.6-9.0 = good | 9.1-9.5 = excellent



Brassica spp



Lettuce



Pepper



Radish



Spinach



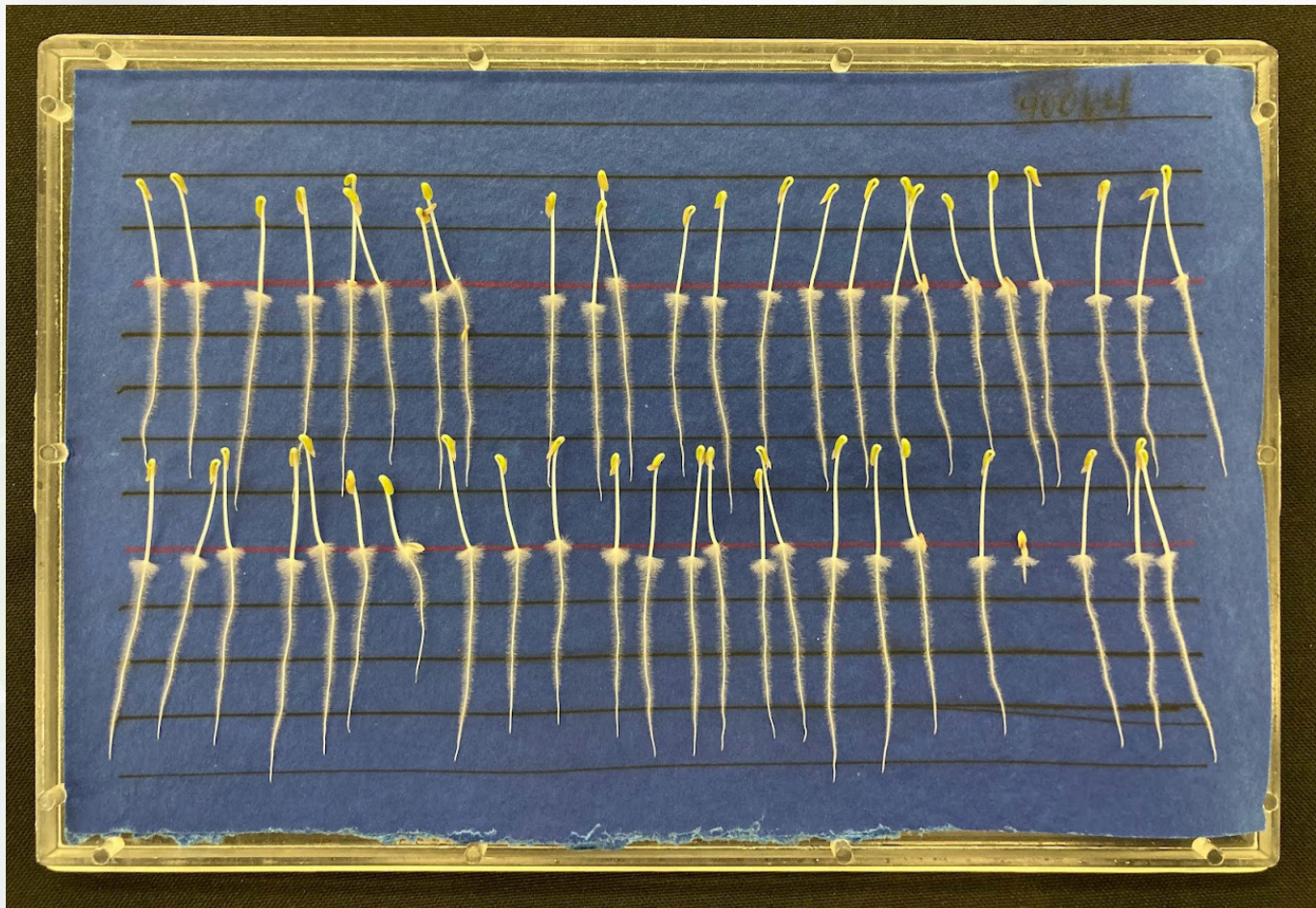
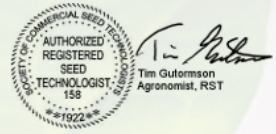
Tomato



Onion

REPORT OF SEED ANALYSIS

Customer:	Date Received	Date Sample Completed	Date of Report	Sample
SoDak Labs, Inc. 236 32nd Ave Brookings, SD 57006	02/27/23	02/27/23	02/27/23	39176
Acct. Num: 205	Sender's Information*:			
	Kind/Brand Name:	Lettuce-Garden		
	Variety:	Green Power		
	Genus/Species:	Lactuca Sativa		
	Lot Number:	15225		



68F 4d Germ: 94% Strong Normals, 2% Slow Normals, and 183 cm of root growth or 3.66cm/seedling
86F-95 Germ: 83% Strong Normals, 1% Slow Normals
Veg Vigor Index: 9.0 Rating

NOTICE: LIMITATIONS OF WARRANTY AND REMEDY

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