

Bermudagrass Seeding: Dates and Rates

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VENDORS STATEMENT OF ANALYSIS		
KIND: BERMUDAGRASS (HULLED/UNHULLED COATED)		
VARIETY: RIVIERA		LOT NUMBER: S-1352-3R
PURE SEED:	50.27%	GERMINATION: 85.00%
INERT MATTER: *	49.71%	HARD SEED: 00.00%
OTHER CROP:	00.01%	TOTAL GERM: 85.00%
WEED SEED:	00.01%	TESTED: 02/06
NOXIOUS:	00.00%	
ORIGIN:	OK	NET WEIGHT: 25 LBS
* INERT MATTER INCLUDES 49.47% COATING MATERIAL		
TX# TX-15418		ARK: R-412
UNAUTHORIZED PROPAGATION PROHIBITED		
'Riviera' Bermudagrass PVP No. 200300221		
U.S. Protected Variety - 1994 PVPA		

Seed label Terminology

Pure Seed: The % by weight of each species and variety present

Germination: The % by weight of each species that will germinate in an ideal lab setting within a prescribed period of time.

Inert Matter: The % by weight of material in the package that will not grow. Soil, broken seed, chaff, and coating materials are considered inert matter.

Other Crop: The % by weight of seeds grown as an agricultural crop. Ex: Orchardgrass seed. Orchardgrass is a difficult to control weed in turf, but its grown for profit in other settings. Therefore, if orchardgrass seed is present in a bag of tall fescue seed, it falls into 'Other Crop' as opposed to 'Weed Seed'.

Weed Seed: The % by weight of all seeds in the package, which are not included in 'Pure Seed' or 'Other Crop'.

Hulled v/s Unhulled: Hulled seeds have the seed husk removed for faster germination while unhulled seeds still have a natural seed husk that protects the seed but may delay germination.

Hulled Seed - Hulled seed have approximately 2,100,000 seeds per pound. The outer skin has been removed to speed germination. Typically germinates in 5-10 days.

Coated Hulled Seed - A basic fertilizer and/or fungicide coating surrounding each hulled seed. Coating assists in seedling establishment. There are approximately 1,000,000 seeds per pound. Germinates in 7 to 14 days.

$$\% \text{ Pure Live Seed} = \% \text{ Pure Seed} \times \% \text{ Germination}$$

In this case,

$$\% \text{ Pure Live Seed} = 50.27\% \times 85\% = 44.7\%$$

% Pure Live Seed has a significant effect on seeding rates and seeding costs!

Relative Pricing

<u>Variety</u>	<u>Cost per lb</u>	
Common	\$2.99	← Need to take into consideration % purity and % germination to calculate which is the best buy in terms of cost per lb of Pure Live Seed!
Common unhulled	\$2.60	
Sahara unhulled and coated	\$2.99	
Savannah hulled	\$5.95	←
Transcontinental	\$6.95	
Yukon	\$16.95 (noted for improved cold tolerance)	
Riviera	\$17.95 (noted for improved cold tolerance)	
Princess	\$22.95	

Dormant Seeding of Bermudagrass

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Variables

2 Seeded Bermudagrasses: Princess and Riviera

4 Seeding Dates: February 15th, March 15th, April 15th, and May 15th

Methodology

Each variety of bermudagrass was hand-seeded at 1 lb pure live seed per 1000 ft² on each seeding date. After seeding, the grasses were immediately covered with remay tarp and irrigated. On May 15th, at the time of the last seeding, the remay tarp was removed and all entries were fertilized with 18-24-12 at the rate of 1 lb P per 1000 ft². All of the plots were then re-covered with tarp for one month. On June 15th, the tarp was removed and each entry was rated for percent cover. Percent cover ratings were taken at 2 week intervals until full establishment. The plots received 1 lb N per 1000 ft² on July 5th, 2006 using Harrell's 30-2-12 with 50% slow release N.

Results

<u>Treatment</u>	<u>% Cover</u>	<u>% Cover</u>	<u>% Cover</u>
	<u>23-Jun</u>	<u>6-Jul</u>	<u>17-Jul</u>
Feb 15 Princess	62.5ab	70ab	85abc
Feb 15 Riviera	47.5bc	61.3abc	73.8cd
Mar 15 Princess	66.3a	75a	88.8ab
Mar 15 Riviera	42.5c	53.8bc	77.5bcd
Apr 15 Princess	64.5ab	73.8a	92.5a
Apr 15 Riviera	36.3c	48.8c	71.3d
May 15 Princess	32.5c	45c	78.8bcd
May 15 Riviera	38.8c	48.8c	70d

* Means followed by the same letter were not statistically different for that rating on that date.

** Highlighted entries were statistically the most established for their particular rating