

FORM 28 (4/2001)

DATA ON NEW VARIETY FOR CERTIFICATION

1. Variety name or temporary designation: Francis (RU9901081) - Long-grain rice Poaceae Oryza Oryza sativa L.
(Variety - Kind)
2. By whom selection was made Karen A.K. Moldenhauer, University of Arkansas Rice Research and Extension Center;
(Breeder) (Applicant or Sponsor's Name & Address)
P.O. Box 351, Stuttgart, AR 72160
3. Cross from which first selected 'Lebonnet'/CI9902/3/'Dawn'/CI9695//'Starbonnet'/4/'LaGrue' (cross no.19930887)
4. Location and year of selection Rice Res. & Ext. Ctr., Stuttgart, AR - 1996
5. Number of years tested and location of test(s) 1999-2000, at Stuttgart, AR; Crowley, LA; Beaumont, TX; and Stoneville MS
5. Breeding procedure used in its development: Hybridization, combination of modified pedigree and bulk breeding methods
7. Area(s) of adaptation Southern U.S. rice growing region
8. Procedure for maintaining Stock Seed Classes and number of generations variety may be multiplied
Headrow, Breeder and foundation seed will be maintained at the University of Arkansas Rice research & Extension Center, P.O. Box 351, Stuttgart, AR 72160
9. Description of the manner in which the variety is constituted when a particular cycle of reproduction or multiplication is specified Not Applicable
10. Additional restrictions on the variety, specified by the breeder, with respect to geographic area of seed production, age of stand, or other factor affecting genetic purity Not Applicable
11. Enclosed with Breeder's Description a representative seed sample of the variety? yes no
12. Will an application be made to the Plant Variety Protection Office? yes no undecided
13. Will the application specify the variety to be sold only as a class of certified seed (Title V Option)? yes no
14. Will the application specify the variety be limited as to the number of generations? yes no
15. If "YES" which classes of production beyond Breeder Seed? Foundation Registered Certified

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VARIETY Rice Francis (RU9901081)

16. Distinguishing Characteristics of Morphology and Physiology:

A. RICE

1. Grain type: 1 1. Long 2. Medium 3. Short
2. Plant height: 100 cm (range 95 - 127 cm)
3. Maturity-Days to Heading (Seeding to 50% heading) approximately 84
4. Plant color at booting 2-5 1. Pale green 2. Green 3. Light Olive Green 4. Olive Green
5. Dark Green
5. Plant Type (culm angle, degrees from perpendicular after flowering) 1 1. Erect (<30°)
2. Intermediate (about 45°)
3. Open (about 60°)

6. FLAGLEAF (after heading):

- a. Pubescence 1 1. Glabrous 2. Intermediate 3. Pubescent
- b. Leaf Angle 1-3 1. Erect 3. Intermediate 5. Horizontal 7. Descending
- c. Blade Color 2-4 1. Pale green 2. Green 3. Olive Green 4. Dark green
5. Purple tips 6. Purple margins 7. Purple blotch 8. Purple

7. PANICLE:

- a. Length 22.6 cm (range 18.5 to 27 cm)
- b. Type 5 1. Compact 5. Intermediate 9. Open
- c. Exsertion 2 1. Well 2. Moderately well 3. Just exserted 4. Partly exserted
5. Enclosed
- d. Axis 2 1. Straight 2. Droopy
- e. Shattering 3 1. Very low (<1%) 3. Low (1-5%) 5. Moderate (6-25%)
7. Moderately high (26-50%) 9. High (>50%)

8. GRAIN (Spikelet):

- a. Awns 0-1 0. Absent 1. Tip awns at high fertility
3. Short and partly awned 5. Short and fully
7. Long and partly awned 9. Long and fully awned
- b. Apiculus color 2-3 1. White 2. Straw 3. Brown (tawny) 4. Red 5. Red apex
6. Purple 7. Purple apex
- c. Stigma Color 1 1. White 2. Light Green 3. Yellow 4. Purple

GRAIN (Spikelet) cont'd:

- d. Lemma and Palea Color 0
- | | |
|-----------------------------------|------------------------------------|
| 0. Straw | 1. Gold &/or gold furrows on straw |
| 2. Brown spots on straw (piebald) | 3. Brown furrow on straw |
| 4. Brown (rawny) | 5. Reddish to light purple |
| 6. Purple spots on straw | 7. Purple furrows on straw |
| 8. Purple | 9. Black |
| 10. White | |
- c. Lemma and Palea Pubescence 1
- | | |
|---------------------------|------------------------|
| 1. Glabrous | 2. Hairs on lemma keel |
| 3. Hairs on upper portion | 4. Short hairs |
| 5. Long hairs (velvety) | |

9. GRAIN (Seed):

- a. Seed Coat (bran) Color 2
- | | | |
|-----------|----------------|--------------------|
| 1. White | 2. Light brown | 3. Speckled brown |
| 4. Brown | 5. Red | 6. Variable purple |
| 7. Purple | | |
- b. Scent (Aroma) 0
- | | | |
|---------------|--------------------|------------|
| 0. Nonscented | 1. Lightly scented | 2. Scented |
|---------------|--------------------|------------|
- c. Seed Size 22.7 (gms/1000 seeds)
- d. Shape Class
- | | | | |
|-----------------|---------------------------|----------------------------|--------------------------|
| Paddy <u>3</u> | 1. Short (2.2:1 and less) | 2. Medium (2.3:1 to 3.3:1) | 3. Long (3.4:1 and more) |
| Brown <u>3</u> | 1. Short (2.0:1 and less) | 2. Medium (2.1:1 to 3.0:1) | 3. Long (3.1:1 and more) |
| Milled <u>3</u> | 1. Short (1.9:1 and less) | 2. Medium (2.0:1 to 2.9:1) | 3. Long (3.0:1 and more) |

17. Disease Reactions-include all diseases tested for (Susceptible or Resistant) On a scale of 0 = immune, 9 = maximum disease. Preliminary ratings for Francis indicate a 6-7 for sheath blight (Rhizoctonia solani Kuhn) and the following

ratings for rice blast (Pyricularia grisea) races IG-1 = 3, IH = 1, IC-17 = 6, IB-49 = 6, IB-45 = 5, IB-1 = 4, BIJ=4, IB-54 = 6, IB-17=5, IE-1 = 5, I E-1k = 6.

18. Describe the number per pound and/or percentage and kinds of variants, eg. height, pubescence, grain length, hull color, etc. The original release of foundation may contain the following in any combination: taller, shorter, earlier, later, glabrous or pubescent plants, as well as intermediate or long-grains and grains with long awns. Other atypical plants may still be encountered in the variety. The total variants and/or off-types numbered less than 1 per 5000 plants.