No. 7500003

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Turf-Seed, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, R IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT RIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. HE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS SS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS D BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PERENNIAL RYEGRASS

'Citation'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office *to be affixed at the City of* Washington *this* 20th *day of* December *in the year of our Lord one thousand nine hundred and* seventy-six

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Acting Secretary of Agriculture

FORM-GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION Citation	2. KIND NAME Perennial ryegrass	FOR OFFICIAL USE ONLY PV NUMBER 7500003
3. GENUS AND SPECIES NAME Lolium perenne L.	4. FAMILY NAME *(Botanical)* Gramineae 5. DATE OF DETERMINATION September 20, 1972	FILING DATE 7.2.74 TIME 10 A.M. FEE RECEIVED $ 250.00 $ 250.00 $ 250.00 BALANCE DUE $ — $ — $ —
6. NAME OF APPLICANT(S) Turf-Seed, Inc.	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* 77 West G. Street P. O. Box 250 Hubbard, Oregon 97032	8. TELEPHONE AREA CODE AND NUMBER 503-981-9571
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* Corporation	10. STATE OF INCORPORATION Oregon	11. DATE OF INCORPORATION July 15, 1970

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Richard H. Bailey, Turf Seed, Inc., P. O. Box 250, Hubbard, Oregon 97032

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Botanical Description of the Variety
- [X] 13C. Exhibit C, Objective Description of the Variety
- [X] 13D. Exhibit D, Data Indicative of Novelty
- [X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [X] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [X] FOUNDATION [ ] REGISTERED [X] CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

June 27, 1974
(DATE)

Richard H. Bailey
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

FORM GR-470 (REVERSE)

U. S. DEPARTMENT
AMS, GRAIN DIV.
PVPO
RECEIVED
JUL 2 1974

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.

13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

Table 3. Maturity Ratings of Perennial Ryegrass Varieties and Selections at New Brunswick, New Jersey

Variety	Date at which 50% of plants initiated anthesis 1972
Citation	May 30 a*
Pennfine	June 1 a
Turfseed Syn B	June 4 b
Lofts Syn C	June 6 b
Lofts Syn D	June 10 c
Lofts Syn F	June 15 d
Manhattan	June 17 d
Syn G	June 20 e

*Dates followed by the same letter do not differ from each other at the 5 percent probability level.

EXHIBIT A

Origin and Breeding History of the Variety

1. Citation perennial ryegrass is a three clone synthetic variety. Clone A was selected from an old turf area in Baltimore, Maryland. Clones B and C were selected from closely mowed turf plots in New Brunswick, New Jersey. The three parental clones were chosen on the basis of their performance in clonal evaluation and polycross progeny performance trials, and their uniformity of flowering period and first anthesis date, in the seed production area of Oregon.

2. Clonal propagules of component clones A, B and C were established in a randomized, replicated, isolated crossing block for the production of Syn I breeders seed. Certified production fields were established from Foundation or Breeders seed.

3. No objectionable off-type or variants have been observed in the reproduction and multiplication of this variety.

4. Syn I and Syn II seed has produced turf of comparable quality and acceptable uniformity.

EXHIBIT B

Botanical Description of the Variety

Citation perennial ryegrass is a dark green, fine-textured, turf-type variety. Ratings at New Brunswick, New Jersey show Citation to be significantly darker green in color compared to Manhattan or Pennfine. Citation has produced turf of excellent quality except where late fall and winter browning due to susceptibility to the brown blight disease and late spring stemminess has detracted from turf quality. Observations indicate that mowing quality of Citation may be somewhat better than either Manhattan or Pennfine except for the late spring period when varieties such as Citation and Pennfine become quite stemmy. Citation has shown susceptibility to the late fall and winter brown blight disease caused by Helminthosporium siccans Drechsler, being comparable to Pennfine in this respect. Turf density has been comparable to Pennfine. Leaves of Citation are comparable in fineness to those of Manhattan. Resistance to Rhizoctonia brown patch is superior to that observed in Manhattan and comparable to that noted in Pennfine. Citation is an early flowering variety comparable to Pennfine in maturity in the New Jersey area. Citation produces no fluorescent seedlings. Late spring stemminess of Citation is comparable to that observed in Pennfine. Winterhardiness observations made in spaced-plant nurseries at Adelphia, New Jersey

EXHIBIT B (Continued)

indicate that Citation is less winter hardy than Manhattan being about equal to Pennfine in this respect. Under seed production conditions in Marion County of Oregon, Citation is four days earlier in maturity than Pennfine. Citation is more decumbent than Pennfine in the final stages of maturation.

10. SPIKE (continued):

[ ][ ][ ] mg. per ten spikes (trimmed to internode below lowest floret)
[ ][ ][ ] mg. lighter per ten spikes than [ ]
[ ][ ][ ] mg. heavier per ten spikes than [ ] } Use standard cultivars from above.
[ ][ ] Florets per spikelet

Percentage of plants with:

Rachis: [ ][ ][ ] % smooth [ ][ ][ ] % rough
Spike color: [ ][ ][ ] % green [ ][ ][ ] % purple
Lemma: [ ][ ][ ] % awned [ ][ ][ ] mm. awn length

[ ][ ] mm. glume length
1=Spikelet length nearly equal to outer glumes
2=Spikelet length much longer than outer glumes

11. COLEOPTILE:

[ ][ ][ ] %Plants with anthocyanin in coleoptile

12. ANTHER COLOR:

[ ][ ][ ] % Plants with white anthers [ ][ ][ ] % Plants with yellow anthers
[ ][ ][ ] % Plants with purple anthers

13. ROOT AND PLANT CHARACTERS:

[1][0][0] % Plants with prostrate growth habit
[ ][ ][ ] % Plants with upright growth habit
[ ][ ][ ] % Plants with fluorescent roots

14. SEED:

1[8][1][2] mg. per 1,000 seed [ ][5][1] mm. total length of 10 seeds [ ][1][3] mm. total width of 10 seeds

15. DISEASE (0=Not tested, 2=Highly susceptible, 4=Moderately susceptible, 6=Moderately resistant, 8=Highly resistant):

[6] Crown rust (Puccinia coronata)
[2] Leaf spot (Helminthosporium)
[0] Snow mold (Typhula)
[0] Dollar spot (Sclerotinia)
[8] Mildew
[0] Red thread (Corticium)
[8] Brown patch (Rhizoctonia)
[ ] Other (specify) _____

16. INSECT (0=Not tested, 2=Highly susceptible, 4=Moderately susceptible, 6=Moderately resistant, 8=Highly resistant):

[0] Specify _____

17. GIVE RESEMBLANCE VALUE IN LEFT COLUMN AND VARIETY IN RIGHT COLUMN FOR VARIETY WITH WHICH COMPARISON IS MADE: (1=Less than, 2=Same as, 3=More erect, more resistant, denser, more persistent, darker or greater height.

Resemblance	Character	Similar variety
3	Plant habit (erectness)	MANHATTAN
3	Tillering	MANHATTAN
2	Winter hardiness	PENNFINE
3	High temp.stress resistance	PENNFINE
3	Turf persistence	MANHATTAN
3	Plant color	MANHATTAN
2	Vertical seedling growth rate	PENNFINE
2	Crown density	MANHATTAN
2	Mower shredding resistance	PENNFINE

18. GIVE AREA OF ADAPTATION AND INTENDED USE: Cool season growing area of USA, and overseeding in the South.

19. GIVE AREA TEST RESULTS PRESENTED FROM: Oregon and New Jersey

COMMENTS:

Table 1. Monthly Turf Quality Ratings of Perennial Ryegrass Varieties and Selections at New Brunswick, New Jersey

	Turf quality ratings 9 = best quality													
Variety	Sept. Oct. 1972	Oct. 16 1972	Nov. Dec. 1972	Mar. 1973	Apr. 1973	May 1973	June 1973	July 1973	Aug. 1973	Sept. 1973	Oct. 1973	Nov. 1973	Dec. 1973	Avg.
1. Lofts Syn C	7.3	7.5	7.8	8.5	8.0	8.0	5.5	6.5	7.0	6.5	8.0	8.0	8.0	7.4
2. Lofts Syn D	7.7	6.8	6.3	6.7	7.0	7.2	6.7	7.0	8.0	8.0	7.3	8.0	8.7	7.3
3. Turfseed Syn B	8.0	7.0	6.5	7.3	7.7	7.2	6.3	7.3	7.3	7.7	7.7	7.7	8.0	7.2
4. Lofts Syn F	7.1	6.7	6.7	7.3	7.7	7.8	6.0	7.0	7.3	6.7	7.3	8.0	8.0	7.2
5. Syn G	7.2	6.3	6.7	8.0	8.0	7.8	6.0	6.7	7.3	6.3	7.0	8.0	8.0	7.2
6. Citation	7.1	7.5	4.0	6.3	7.0	5.8	6.3	7.7	8.0	8.7	8.0	8.0	7.7	7.1
7. Syn W	8.0	8.0	5.5	7.0	7.0	6.0	5.7	7.7	8.0	8.0	8.0	7.0	7.0	7.1
8. Manhattan	6.8	6.8	6.6	7.6	7.5	7.2	4.5	5.5	6.0	6.5	7.4	8.0	8.0	6.8
9. Pennfine	6.7	6.6	4.6	5.5	4.5	5.0	5.7	6.7	7.0	7.2	7.2	7.5	7.7	6.5
10. Sprinter	5.5	5.3	5.3	7.0	6.5	6.8	4.5	4.5	4.5	4.0	5.5	5.5	5.5	5.4
11. NK 200	5.0	5.5	5.8	6.3	6.7	6.2	5.0	4.0	4.3	3.0	4.3	4.3	4.3	5.0
12. Pelo	4.2	4.2	5.2	5.3	5.3	4.8	3.0	3.3	3.7	3.0	4.7	5.3	5.7	4.4
13. NK 100	3.9	4.0	3.7	4.7	4.7	3.8	2.3	3.7	4.0	3.7	4.7	5.0	5.0	4.1
14. Splendor	4.1	3.8	4.5	5.0	4.0	3.8	3.0	2.3	3.0	2.7	4.0	4.0	4.0	3.7
15. Caprice	3.7	3.7	4.5	4.3	4.0	3.8	2.0	3.0	3.0	3.3	4.0	4.0	4.0	3.7
16. Barenza	3.4	4.0	4.5	4.0	4.0	3.5	2.3	2.3	3.0	4.0	4.0	4.0	4.3	3.6
17. Game	3.9	4.7	3.3	4.3	4.0	3.2	2.3	2.0	2.3	2.3	3.7	3.0	3.7	3.3
18. Oregon Common	3.1	3.8	2.8	3.2	3.0	1.9	1.4	1.4	2.0	2.2	3.2	3.0	3.0	2.7
LSD at 5%	0.6	0.6	0.7	0.9	0.7	0.6	1.2	0.8	0.8	1.2	0.8	0.5	0.8	

Test seeded August 1972
Mowed at 3/4 inch
Moderate to high fertility maintained during all seasons.

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Table 2. Performance of Perennial Ryegrass Varieties at New Brunswick, N. J.
Test seeded August 1972

Variety	Turf quality 9=best average	Color rating 9 = darkest Oct. 1972	Aug. 1973	Nov. 1973	Avg.	Brown blight percent brown Dec.1972	Brown patch 9=most disease June '73	Tillers per 100 sq. cm Nov.'73	Leaf Width Mm Nov.'73
1. Lofts Syn C	7.4	7.5	7.0	8.0	7.5	9	5.0	308	1.8
2. Lofts Syn D	7.3	6.3	6.3	7.0	6.5	23	3.3	352	1.6
3. Turfseed Syn B	7.2	7.5	7.0	7.7	7.4	28	3.3	313	1.7
4. Lofts Syn F	7.2	6.3	6.7	7.0	6.7	12	4.3	329	1.7
5. Syn G	7.2	6.0	6.7	6.7	6.5	10	4.7	318	1.8
6. Citation	7.1	8.0	8.0	8.0	8.0	74	3.0	321	2.0
7. Syn W	7.1	8.0	8.0	9.0	8.7	31	2.3	295	1.9
8. Manhattan	6.8	6.2	7.0	7.0	6.7	15	6.2	288	1.9
9. Pennfine	6.5	6.6	5.5	6.5	6.2	66	3.3	322	1.8
10. Sprinter	5.4	5.5	5.0	5.5	5.3	21	6.0	202	2.2
11. NK 200	5.0	5.7	5.3	6.3	5.8	18	5.0	202	2.3
12. Pelo	4.4	3.7	3.7	5.3	4.2	9	6.7	251	2.2
13. NK 100	4.1	4.3	4.3	5.0	4.5	30	7.0	220	2.3
14. Splendor	3.7	4.3	4.0	4.0	4.1	10	6.3	206	2.3
15. Caprice	3.7	3.7	3.7	4.3	3.9	14	8.0	191	2.4
16. Barenza	3.6	4.0	3.7	4.7	4.1	13	7.7	191	2.4
17. Game	3.3	5.3	4.0	5.0	4.8	33	6.3	207	2.3
18. Oregon Common	2.7	3.8	2.8	4.9	3.8	35	8.4	206	2.3
LSD at 5%		0.8	0.8	0.9		11	1.4	34	0.2
Merion Kentucky bluegrass								226	2.4

Test mowed at 3/4 inch and maintained at moderate to high fertility at all seasons.

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EXHIBIT D

Data Indicative of Novelty

Novelty is based on the unique combination of the following characters:

'Citation' most closely resembles 'Pennfine' except it has shown (1) a darker green color in turf and (2) a better record of performance in turf under summer stress conditions at New Brunswick, New Jersey.

EXHIBIT E

Statement of Applicant's Ownership

Turf-Seed, Inc., Hubbard, Oregon, believes it is the sole, original and first breeder of the Citation variety of perennial ryegrass for which it solicits a certificate of protection.

Application No. 7500003
'Citation'

9/3/75

U.S. DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service
Grain Division

Objective Description of Cultivars
RYEGRASS
(Lolium spp.)

1. SPECIES:

[2] 1=L. multiflorum (annual or Italian: includes Westerwoldicum)
2=L. perenne (perennial) 3=L. rigidum (includes Wimmera)
4=Hybrid (of species) _____ 5=Other (specify) _____

2. PLOIDY:

[1] 1=Diploid 2=Tetraploid 3= Other (specify) _____

3. DURATION:

[3] 1=Annual or biennial 2=Short lived perennial (3-4 years)
3=Perennial (more than 4 years)

STANDARD CULTIVARS

1=Gulf 2=Wimmera 62 3=Linn 4=Pelo
5=Norlea 6=Aberystwyth S-23 7=Manhattan 8=Pennfine

4. MATURITY (50% Headed): (Use standard cultivars from above.) SEE TABLE A For New Jersey Data.

[ ] 1=Very early 3=Early 5=Medium 7=Late 9=Very late
[4] Days earlier than [8] standard cultivar in Marion county, Oregon
[ ] Days later than [ ] standard cultivar

5. MATURE PLANT HEIGHT: (Use standard cultivars from above.) SEE TABLE B

[5 1] cm. High [3] cm. Shorter than [8] standard cultivar
[ ] cm. Taller than [ ] standard cultivar

6. PERCENT WINTER DAMAGE (estimated as percent of the area appearing dead): (Use standard cultivars from above.)

[0] Percent damage of application cultivar
[0] Percent damage of [7] standard cultivar under New Jersey Turf Conditions

7. TURF DENSITY: (Use standard cultivars from above.) SEE TABLE C

[3 2 1] Tillers per 100 sq. cm.
[1] Less tillers per 100 sq. cm. than [8] standard cultivar
[3 3] More tillers per 100 sq. cm. than [7] standard cultivar

8. FLAG LEAF (at full growth): (Use standard cultivars from above.)

[ ] cm. Length (from ligule to tip) SEE TABLE D
[ ] cm. Shorter than [ ] standard cultivar
[ ] cm. Longer than [ ] standard cultivar
[ ] mm. Width (at widest point)
[ ] mm. Narrower than [ ] standard cultivar
[ ] mm. Wider than [ ] standard cultivar
[ ] Flag leaf at boot stage: 1=Deflexed 3=Recurved 5=Horizontal
7=Semi-erect 9=Erect

9. LEAVES:

[2] Vernation: 1=Leaves rolled in young shoots
2=Leaves semi-rolled (folded with rolled edges)
3=Leaves folded in young shoots
[1 0 0] % Plants with anthocyanin in lower leaf sheath restricted to crown area.
[3] Foliage color: 1=yellow green 2=medium green 3=blue green

10. SPIKE: SEE TABLE B

[1 8 0] mm. Spike length (tip to internode below lowest floret)
[1 0] mm. Shorter than [8]
[ ] mm. Longer than [ ] (Use standard cultivars from above.)

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Table 1. Monthly Turf Quality Ratings of Perennial Ryegrass Varieties at New Brunswick, New Jersey.

	Turf quality ratings 9 = best quality													
	Sept. Oct. 1972	Oct. 16 1972	Nov. Dec. 1972	Mar. 1973	Apr. 1973	May 1973	June 1973	July 1973	Aug. 1973	Sept. 1973	Oct. 1973	Nov. 1973	Dec. 1973	Avg.
1. Yorktown	7.3	7.5	7.8	8.5	8.0	8.0	5.5	6.5	7.0	6.5	8.0	8.0	8.0	7.4
2. Omega	8.0	7.0	6.5	7.3	7.7	7.2	6.3	7.3	7.3	7.7	7.7	7.7	8.0	7.2
3. Citation	7.1	7.5	4.0	6.3	7.0	5.8	6.3	7.7	8.0	8.7	8.0	8.0	7.7	7.1
4. Manhattan	6.8	6.8	6.6	7.6	7.5	7.2	4.5	5.5	6.0	6.5	7.4	8.0	8.0	6.8
5. Pennfine	6.7	6.6	4.6	5.5	4.5	5.0	5.7	6.7	7.0	7.2	7.2	7.5	7.7	6.5
6. NK-200	5.0	5.5	5.8	6.3	6.7	6.2	5.0	4.0	4.3	3.0	4.3	4.3	4.3	5.0
7. Pelo	4.2	4.2	5.2	5.3	5.3	4.8	3.0	3.3	3.7	3.0	4.7	5.3	5.7	4.4
8. NK-100	3.9	4.0	3.7	4.7	4.7	3.8	2.3	3.7	4.0	3.7	4.7	5.0	5.0	4.1
9. Barenza	3.4	4.0	4.5	4.0	4.0	3.5	2.3	2.3	3.0	4.0	4.0	4.0	4.3	3.6
10. Oregon Common	3.1	3.8	2.8	3.2	3.0	1.9	1.4	1.4	2.0	2.2	3.2	3.0	3.0	2.7
LSD at 5%	0.6	0.6	0.7	0.9	0.7	0.6	1.2	0.8	0.8	1.2	0.8	0.5	0.8	

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Test seeded August 1972
Mowed at 3/4 inch
Moderate to high fertility maintained during all seasons.

Table 2. Performance of Perennial Ryegrass Varieties at New Brunswick, N. J.
Test seeded August 1972

Variety	Turf quality 9=best average	Color rating 9 = darkest				Brown blight percent brown	Brown patch 9=most disease	Tillers per 100 sq.cm.	Leaf width mm
		Oct. 1972	Aug. 1973	Nov. 1973	Avg.	Dec. 1972	June '73	Nov. '73	Nov. '73
1. Yorktown	7.4	7.5	7.0	8.0	7.5	9	5.0	308	1.8
2. Omega	7.2	7.5	7.0	7.7	7.4	28	3.3	313	1.7
3. Citation	7.1	8.0	8.0	8.0	8.0	74	3.0	321	2.0
4. Manhattan	6.8	6.2	7.0	7.0	6.7	15	6.2	288	1.9
5. Pennfine	6.5	6.6	5.5	6.5	6.2	66	3.3	322	1.8
6. NK-200	5.0	5.7	5.3	6.3	5.8	18	5.0	202	2.3
7. Pelo	4.4	3.7	3.7	5.3	4.2	9	6.7	251	2.2
8. NK-100	4.1	4.3	4.3	5.0	4.5	30	7.0	220	2.3
9. Barenza	3.6	4.0	3.7	4.7	4.1	13	7.7	191	2.4
10. Oregon Common	2.7	3.8	2.8	4.9	3.8	35	8.4	206	2.3
LSD at 5%		0.8	0.8	0.9		11	1.4	34	0.2
Merion Kentucky Bluegrass									

Test mowed at 3/4 inch and maintained at moderate to high fertility at all seasons.

Table 3: Color rating of Perennial Ryegrass Varieties at Canby, Oregon. Test seeded August 31, 1975 by Dr. William A. Meyer.

Variety	Average Color Rating Dec. 19,1975 (9 = darkest)
Manhattan	6.0
Pennfine	6.0
Omega	7.7
Citation	8.0
Yorktown	7.0
Linn	5.0
LSD at 5%	0.8