

# Zwaan & De Wiljes, Ltd.

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, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS MASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

### PERENNIAL RYEGRASS

*'Sprinter'*

*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 15th day of February in the year of our Lord one thousand nine hundred and seventy-seven*

*Attest:*

*J. H. Roll*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*J. B. Gandy*  
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION <b>SPRINTER</b>	2. KIND NAME <b>Perennial Ryegrass</b>	FOR OFFICIAL USE ONLY	
		PVPO NUMBER <b>72065</b>	
3. GENUS AND SPECIES NAME <b>Lolium perenne L</b>	4. FAMILY NAME (Botanical) <b>Gramineae</b>	FILING DATE <b>12-10-71</b>	TIME <b>11:30</b> <b>A.M.</b> <b>(E.M.)</b>
	5. DATE OF DETERMINATION <b>28-8-'70</b>	FEE RECEIVED <b>\$ 750.00</b>	CHARGES _____
6. NAME OF APPLICANT(S) <b>ZWAAN &amp; DE WILJES LTD.</b>	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>Stationsstraat 124 P.O. Box 2 SCHEEMDA, The Netherlands</b>	8. TELEPHONE AREA CODE AND NUMBER <b>05979-233</b>	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)	10. STATE OF INCORPORATION <b>Limited Liability Company</b>	11. DATE OF INCORPORATION <b>1914</b>	

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

no representative. All documents relevant to this application should be sent to Zwaan & de Wiljes, Scheemda.

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- 12A. Exhibit A, Origin and Breeding History of the Variety (See Section 52, P.L. 91-577)
- 12B. Exhibit B, Botanical Description of the Variety
- 12C. Exhibit C, Objective Description of the Variety
- 12D. Exhibit D, Data Indicative of Novelty
- 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

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. (See Section 52, P.L. 91-577).

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), P.L. 91-577) (If "Yes," answer 14B and 14C below.)  YES  NO

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

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? **2 generations viz. basic-seed and certified seed, first generation.**

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

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 (P.L. 91-577).

29th November 1971  
(DATE)

ZWAAN & DE WILJES LIMITED  
(SIGNATURE OF APPLICANT)

**00001**

\_\_\_\_\_  
(DATE)

\_\_\_\_\_  
(SIGNATURE OF APPLICANT)

INSTRUCTIONS



GENERAL: Send an original copy of the application, exhibits and \$50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. 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.

12a 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.

12b 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.

12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, chemical tests, etc.

12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

120100  
12-10-71 1130  
1500R

Novelty Statement "Sprinter"

"Sprinter" is more similar to "Lamora", "Barenza", "Vigor", "Compas", "Springfield" and "Maestro", than any other variety.

"Sprinter" differs from "Lamora", "Barenza" and "Compas" by having a darker foliage color, dark green versus medium green, and by a maturity date (50% headed) being 5 or more days later.

"Sprinter" has a darker foliage color, a more prostrate growth habit and a faster spring growth than "Vigor", "Springfield" and "Maestro".

In a rating scale for color darkness "Sprinter" was scored 8,8, whereas the other varieties were scored 7,1 or lower. A difference of 1,4 was required for a statistically significant difference at the 0,05 level of significance.

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*Zwaan & De Wiljes - Scheemda (Holland)*

Attachment to application for Plant Variety Protection Certificate  
of *Lolium perenne* L "SPRINTER"

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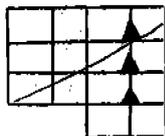
12e Exhibit E - Statement of the Basis of Applicant's Ownership

Applicant, Zwaan & de Wiljes Limited, Scheemda  
(The Netherlands) is the actual breeder.

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10. SPIKE (continued):



mg. per ten spikes (trimmed to internode below lowest floret)  
 mg. lighter per ten spikes than  } Use standard cultivars from above.  
 mg. heavier per ten spikes than  }  
 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. ANTHOR COLOR:

% Plants with white anthers  % Plants with yellow anthers  
 % Plants with purple anthers

13. ROOT AND PLANT CHARACTERS:

% Plants with prostrate growth habit  
 % Plants with upright growth habit  
 % Plants with fluorescent roots

14. SEED:

mg. per 1,000 seed  mm. total length of 10 seeds  mm. total width of 10 seeds

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

<input type="text" value="6"/>	Crown rust ( <u>Puccinia coronata</u> )	<input type="text" value="8"/>	Mildew
<input type="text" value="8"/>	Leaf spot ( <u>Helminthosporium</u> )	<input type="text" value="6"/>	Red thread ( <u>Corticium</u> )
<input type="text" value="0"/>	Snow mold ( <u>Typhula</u> )	<input type="text" value="0"/>	Brown patch ( <u>Rhizoctonia</u> )
<input type="text" value="0"/>	Dollar spot ( <u>Sclerotinia</u> )	<input type="text" value="6"/>	Other (specify) <u>Fusarium</u>

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

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
<input type="text" value="2"/>	Plant habit (erectness)	<u>manhattan</u>
<input type="text" value="3"/>	Tillering	<u>pela</u>
<input type="text" value="2"/>	Winter hardiness	<u>manhattan</u>
<input type="text" value="1"/>	High temp. stress resistance	<u>—</u>
<input type="text" value="3"/>	Turf persistence	<u>manhattan</u>
<input type="text" value="2"/>	Plant color	<u>manhattan</u>
<input type="text" value="2"/>	Vertical seedling growth rate	<u>manhattan</u>
<input type="text" value="1"/>	Crown density	<u>—</u>
<input type="text" value="2"/>	Mower shredding resistance	<u>manhattan</u>

18. GIVE AREA OF ADAPTATION AND INTENDED USE: temperate zones

19. GIVE AREA TEST RESULTS PRESENTED FROM: BSA (Germany); IVRO (Holland);

COMMENTS:

Rutgers University of New Jersey.  
The sports turf research institute, Bingley (GB)

Scheemda, October 15th 1975

5 of 7

00005

Attachment to application for Plant Variety Protection Certificate  
of *Lolium perenne* L "SPRINTER"

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Sprinter was developed for sportsfield purposes

Origin and Breeding History of the Variety.

12a Exhibit A.

1. The variety "Sprinter" has been derived from plants collected in the central eastern part of The Netherlands in 1968. The breeding system was through clonal selection and individual testing of clonal topcrosses between the best clones.
2. Seed was harvested from clonal plots in 1969. This seed was sown late 1969 in the greenhouse in order to determine on individual plants the homogeneity of the clones, date of shooting and vegetative development as compared with other varieties during 1970.  
In 1970 the variety "Sprinter" was established on 5 clones.
3. The homogeneity, based on observations on single plant observations on the clonal seed, was very good. It was observed that this homogeneity was better than in existing commercial varieties as Pelo, Semperweide or S 23.
4. See 12d.

Attachment to application for Plant Variety Protection Certificate  
of *Lolium perenne* L "SPRINTER"

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Botanical Description of the Variety.

12b Exhibit B

The variety "Sprinter" has a dark foliage and is darker than many commercial varieties tested so far in various trials (S 23, Semperweide, Pelo, Manhattan). The leafwidth is slightly less than Perma.

Shooting date 5 days after Semperweide of Zwaan & de Wiljes, Scheemda, The Netherlands.

When the plants are mown during shooting all plants will flower again the same year under Dutch conditions. Culm length is equal to Semperweide.

The variety "Sprinter" shows similarities to "Perma" but the growth habitus is flatter and the leaf a little narrower. A very important characteristic is sprinter's very good turf formation. This was also observed in lawn trials in England by: The Sports Turf Research Institute. (See The Journal of the S.T.R.I. number 46 : 142) The S.T.R.I. found that out of 16 Perennial Ryegrasses tested for sportsfield purposes Sprinter (= ZW 68 - 49 in the article) rates highest.

Individual plants freely developing form a very compact clump. Sprinter is good resistant to rust.