GRASS SEED CERTIFICATION REQUIREMENTS AND STANDARDS

I. BASIC RULES

<u>The UCIA General Seed Certification Requirements and Standards are basic</u> and with the following constitute the requirements and standards for grass seed certification.

II. SEED PRODUCTION

- A. APPLICATIONS
 - 1. Dates and fees for applications are as listed in the General Requirements and Standards.
 - 2. For the seedling year, fill out "Application for Certification for Annual Crops and Seedling Perennial Crops"; in the second and subsequent years fill out "Application for Certification for Established Perennial Crops".
- B. VARIETY ELIGIBILITY

For some varieties a Registered class is not allowed. Check variety release notice or consult a UCIA representative).

- C. LAND REQUIREMENTS
 - 1. Grass entered for certified seed production must be planted on land free from any type of perennial grass plants (including quackgrass and other weedy perennial grasses) as determined by field inspection by a UCIA representative at a time preceding planting when such grasses would be actively growing.
 - 2. Foundation, Registered, and Certified seed must be produced on land which has not grown or been seeded to the same genus during four, three, or two years, respectively, prior to the year of proposed planting.
 - 3. Isolation:
 - a. A fenceline, roadway, or strip at least 5 feet in width and which is mowed, uncropped, or planted to some other crop than the kind in question shall constitute a field boundary (unit of certification).
 - b. A seed field, to be eligible for the production of a class of

certified seed, must be isolated from any other strain of the same species or any other species with which cross pollination occurs, in bloom at the same time, as listed below:

	Minimun Feet *b	n Isolati	on –	
Factor	Found.	Reg.	Cert.	Border to be Removed *c
Cross-pollinated *a	900	300	165	0
	600	225	100	9
	450	150	75	15
Strains at least 80% apomictic and highly self-fertile species	60	30	15	0
	30	15	15	9

Varieties that are 95 percent or more apomictic, as defined by the originating breeder, shall have the isolation distance reduced to a mechanical separation only. Varieties less than 95 percent apomictic and all other cross-pollinating species that have an isolation zone of less than 10 percent of the entire field, no isolation is required. (Isolation zone is calculated by multiplying the length of the common border with other varieties of grass by the average width of the certified field falling within the isolation distance required.)

*a Varieties / cultivars within each of the following perennial grass tribe Triticeae genus and/or species groups must be isolated from each other as required for cross-pollinated species in the above table. Isolation between species of different groups requires only a mechanical separation. Isolation requirements may be modified based on published evidence of ploidy levels and genome identification for specific strains.

- (1) Agropyron crested and Siberian wheatgrasses
- (2) Elymus most Elymus species (examples are slender wheatgrass, blue wildrye, Canada wildrye, Dahurian wildrye, big squirreltail, bottlebrush squirreltail, etc.) are self pollinated and need isolation only as required in the above table for highly selffertile strains within the same species. Exceptions are the following cross-pollinated *Elymus* species, which must be isolated from each other, but not from the selfpollinated *Elymus* species:
 - (a) Snake River, thickspike, streambank, and Montana (or northern) wheatgrasses, R/S hybrid wheatgrass, and quackgrass; R/S hybrid wheatgrass and quackgrass must also be isolated from *Pseudoroegneria* species.
- (3) Leymus flowering-time groups may be separated as follows:
 - (a) Early basin, beardless, and Salina wildryes
 - (b) Late Altai, mammoth, and giant wildryes and American dunegrass
- (4) Pascopyron western wheatgrasses.
- (5) Psathryostachys Russian wildryes
- (6) Thinopyrum intermedium intermediate and pubescent wheatgrasses
- (7) *Thinopyrum ponticum* tall wheatgrasses
- (8) *Pseudoroegneria* bluebunch (or beardless) wheatgrasses; *Pseudoroegneria* species must also be isolated from R/S hybrid wheatgrass and quackgrass
- *b When different classes of the same variety are being grown on the same or adjacent fields, the isolation requirements may be reduced to 25% of that shown in the above table.
- *c Isolation distance may be reduced by removing specified border on fields of 5 acres or more. Such removal shall not occur until pollination of the crop to be certified is completed.

*d Isolation for the Certified class is based on the size of the certified field and the percentage of the field within 165 feet of another variety of grass. If 10 percent or less of the certified field is within the 165 foot isolation zone, no isolation is required--only a definite separation such as a road, fenceline, bare ground, etc. If more than 10 percent of the field is within the isolation zone, that part of the field must not be harvested as certified seed.

The "isolation zone" is that area calculated by multiplying the length of the common border(s) with other varieties of grass by the average width of the certified grass field falling within the 165 ft. isolation distance requirement.

Isolation requirements for perennial crop types within the **Triticeae** tribe; abbreviations: ba = barley, sq = squirreltail, wg = wheatgrass, wr = wildrye. Apply the required distances for cross-pollinated (x) or highly self-fertile (s) crop types, or mechanical separation (\cdot). (x) and (s) on the table diagonal indicate the mode of pollination for the species.

			igo	nai	mu	cat			lode			aut		Ji u			03.		Leymus	3			Pas	Psath				Dee	uda
Genera →	Agr c	opyr n						E	lymus						Hor d- eum	Ea	irly seas				eason		co- pyru m	yro- stach ys	Th	inopyr	um	roe	udo- gneri a
Crop	Crested wg	Siberian wg	Slender wg	Blue wr	Canada wr	Dahurian wr	Big sq	Bottlebrush sq	Montana (Northern) wa	Snake River wg	Streambank wg	Thickspike wg	R/S hybrid wg	Quackgrass	Meadow ba	Basin wr	Manystem (beardless) wr	Salina wr	American dunearass	Altai wr	Giant wr	Mammoth wr	Western wg	Russian wr	Intermediate wg	Pubescent wg	Tall wg	Beardless wg	Bluebunch wg
Crested	x	x																											
wg		~																											
Siberian		x	•	•					•	•				•	•					•	•		•		•				
wg Slender															S														
wg			S	S	S	S	S	S	S	S	S	S	S	S	3	•	•	·	•	•	•	•	•	•	•	•	•	•	·
Blue wr				s	s	s	s	s	s	s	s	s	s	s	s	•	•		•	•	•		•	•	•	•			
Canada															S														
wr					S	s	S	S	S	S	S	S	S	s		•	•		•		•	•	•	•	•	•	•	•	
Dahurian						s	s	s	s	S	s	s	s	s	S														
wr						•																							
Big sq				-		-	S	S	S	S	S	S	S	S	S	·	•	•	•	•	•	•	•	•	•	•	·	·	•
Bottlebrus								s	s	s	s	s	s	s	S												•		
h sq Montana															•														
wg									X	x	x	x	x	X	S	•	·	·	·	•	•	•	•	•	•	•	•	•	·
Snake	1														S														
River wg										X	X	X	x	X	-	•		·		•	•	•	•	•	•	·	•	•	
Streamba											x	x	x	x	S														
nk wg				-		-					~	~	~	^															
Thickspik e wg												x	x	х	S												•		
R/S hybrid													x	x	S													x	x
Quackgra													^	^		-		-	-	-	-	-	-			-		^	^
SS														X	S	•	•	•	•	•	•	•	•	•	•	•	•	X	X
Meadow															_														
ba															s	•	·	•	•	•	•	•	•	•	•	·	•	•	•
Basin wr																X	X	X	s	s	s	s	•	•	•	·	•	•	·
Manystem																	x	x	S	S	S	S							
wr																	^												
Salina wr																		X	S	S	S	S	•	•	·	•	•	·	•
American																			x	x	x	x							•
dunegrass																													
Altai wr																				x	X	X	•	•	·	·		•	•
Giant wr																					X	X	•	•	•	•	•	•	·
Mammoth wr																						x			•			•	
VVI	1					1																							

Western												v						
wg												x				•	•	
Russian													v					
wr													x			-	-	
Intermedi														v	~			
ate wg														X	X			
Pubescen															x			
t wg															^			
Tall wg																X	·	•
Beardless																	×	v
wg																	х	x
Bluebunc																		v
h wg																		X

D. SEEDING

- It is recommended that grasses be planted in rows at least 18 inches (preferably 30" - 36") apart so that (a) volunteer plants and weeds may be cultivated out; (b) makes it easier to inspect and rogue out off-types; and (c) seed yields will be maximized.
- 2. When more than one strain or variety of any one genus of grass may be grown for seed production on any one farm the UCIA must be consulted to ensure proper planting equipment cleanup and field isolation so varietal mixtures do not occur.
- 3. Reseeding new grass plantings shall be limited to the first two years, and the field must be inspected before reseeding. Additional fees may be charged for re-inspection. The seed source for reseeding must be of the same class as the original seed used, or the field will be reclassified to the lowest seed class planted.

E. FIELD INSPECTION

- 1. A seedling inspection will be made by a UCIA representative during the first season of growth to evaluate the stand and perennial weed control status.
- 2. At least one field inspection after heading out but before harvest will be made each year that a certified seed crop is to be harvested.

F. FIELD STANDARDS

- 1. Fields producing Foundation or Registered seed will be subject to reclassification or rejection if volunteer plants of the same species are allowed to mature seed. Excessive natural reseeding may disqualify Certified fields.
- 2. Tolerance in the Field for Other Varieties and Grasses

Maximum Permitted in	n Each Class	

Factor	Foundation	Registered	Certified
Other Varieties	0.1%	0.5%	1.0%
Other Grasses	0.1%	0.5%	1.0%

G. HARVEST

Grass seed may be moved in bulk (box or truck) or in bags (each clearly identified) from the harvesting machine to farm storage or to conditioning facilities. Identity and purity of seed must be maintained and prior approval of equipment and facilities used for transporting, handling, and storing of seed must be given by a UCIA representative.

III. CONDITIONING, SAMPLING, AND LABELING

A. SEED STANDARDS

1. General

	Standards for Each Class									
Factor	Foundation	Registered	Certified							
Total other crops (max) Other varieties (max) *a Other kinds (max) *b	0.1% 0.1% 0.1% 0.1%	0.5% 0.5% 0.1% 0.2%	1.5% 1.0% 0.25% (turf use) 0.5% (forage use)							
Weed seed, non-regulated weeds (max)	0.1%	0.2%	0.3%							
Weed seed, regulated weeds Prohibited *d Restricted *e Objectionable *f	None None None	None None 9 per lb	None 9 per lb 18 per lb							

- *a Other varieties of bluegrass in a bluegrass variety (max): 0.5% Registered; 2.0%, Certified
- *b Seed of Critana thickspike wheatgrass (*Agropyron dasystachum*) may contain up to 30% slender wheatgrass (*Agropyron trachycanlum*) type.
- *c For Indian ricegrass, 0.25%.
- *d Includes the noxious weeds listed in the General Requirements and Standards and the following: perennial sowthistle (*Sunchus arvensis*), bur ragweed (*Franseris discolor*), and halogeton (*Halogeton gloneratus*).
- *e Wild oats and jointed goatgrass (*Triticum cylindricum*).
- *f Poverty weed

2. Specific

Variety	Type of Re- production *a	Percent Pure Seed (min.%) FRC	Percent Inert Matter (max %) FRC	Percent Germ *b (min.%) FRC
BLUEGRASS Kentucky	А	95	5	80
BROMEGRASS Meadow Smooth	ССС	95 95	5 5	85 85
FESCUE Tall	С	95	5	85
FOXTAIL (Creeping)	с	85	15	80
ORCHARDGRASS	С	90	10	80
RICEGRASS, Indian	С	95	5	80
TALL OATGRASS	С	90	10	70
WHEATGRASS Beardless Bluebunch Crested Intermediate Pubescent R/S Hybrid Siberian Steambank Tall Thickspike Western	C C C C C C C C C C C C C C C C C C C	90 90 90 90 90 87.5 90 90 95 90 90	10 10 10 10 10 15 10 10 5 10 10	80 80 80 80 80 80 80 80 80 80 80 80 80
WILDRYE Russian Basin	сс	90 90	10 10	80 80

*a C = cross pollinated; S = self pollinated; A = apomictic

*b Includes dormant seed

B. SEED SAMPLING

A representative sample of 8 oz. of each seed lot shall be drawn by a UCIA representative after the seed has been conditioned by an approved cleaning facility.

C. TAGS AND SEALS

Each bag sold or distributed as certified seed must be packed in new bags and bear the official tag attached to each container.