

Morocco

Wheat, Barley and Oats

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years) ^a	1	1	1	1
Isolation (min. meters) ^b	10	10	10	10
Other varieties (max. %)	0.05	0.1	0.2	0.3
Other species (max. no.) ^c	1/15000	1/10000	1/5000	1/2000
Noxious weeds (max. no.)				
Infected plants (max. no.) ^d	1/10000	1/5000	1/2000	1/1000
Seed Standards				
Pure seed (min. %)	99	99	98.5	98
Other varieties (max. no/1000 seeds)	1	1	2	3
Weed seeds (max. no/kg)	6	8	20	30
Cereal species	1	2	12	15
Wild oats ^e	0	0	1	1
Noxious weeds ^f	3	4	6	8
Infected seeds (max, %)				
-Loose smut and common bunt	NA	0.02	0.05	0.1
Insect infestation				
- Live insects (maximum, number)	0	0	0	0
- Insect damage (maximum, %)	0.1	0.1	0.1	0.1
Germination (min. %)	85	85	85	85
Moisture content (max. %)	14	14	14	14
Specific gravity (min.)				
Wheat	79	79	79	79
Barley	60	60	60	60
Oats	50	50	50	50

^a For oat the rotation can be the same species if the previous generation of seed has been accepted

^b Isolation for same or higher category of the same species; 2-4 m for other species and 150 m for field of same species with 0.1% of smut for pre-baisc seed, 0.2% for basic seed, 0.3% for certified and 0.5% for certified 2

^c Impurities of other crop species refers to all cereal species other than the crop in question (for example in bread wheat:other crops include barley, oat, durum wheat, rye and triticale)

^d *Ustilago* spp., *Tilletia caries* or *Helminthosporium gramineum* where applicable

^e Maximum permitted for wild oats in cultivated oats are 1,2,3 and 4 seeds/kg for pre-basic, basic , certified 2 and 2 respectively.

^f Noxious weeds refers to *Astragalus* spp. , *Emex spinosa*, *Galium tricornitum* and *Vaccaria pyramidata*

Morocco

Triticale and Rye

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)	1	1	1	1
Isolation (min. meters) ^a	10	10	10	10
Other varieties (max. %) ^b	0.05	0.1	0.3	0.5
Other species (max. no.) ^c	1/15000	1/10000	1/5000	1/2000
Noxious weeds (max. no.)				
Infected plants (max. no.)	1/10000	1/5000	1/2000	1/1000
Seed Standards				
Pure seed (min. %)	99	99	98	
Other crop seeds (max. %)				
Varieties	3	3	10	
Weed seeds (max. no/kg)	8	8	20	
Cereal species	2	2	12	
Wild oat	0	0	1	
Noxious weeds ^d	4	4	6	
Infected seeds (max.)				
Live insects	0	0	0	
Insect damage (max. %)	0.1	0.1	0.1	
Germination (min. %)	80	80	80	
Moisture content (max. %)	14	14	14	
Specific gravity (min.) ^e	60	60	60	

^a Isolation for the same or higher category of the same species; 2-4 m for other species and 150 m for field of same species with 0.1% smut infection for pre-basic seed, 0.2% for basic seed, 0.3% for certified 1 and 0.5% for certified 2. For rye isolation is 1000m

^b For rye (cross pollinated crops), the standards are 0.1%, 0.3% and 0.5% for pre-basic, basic and certified seed, respectively

^c Impurities of other crop species refers to all cereal species other than the crop in question (e.g. in rye: barley, oat, wheat and triticale)

^d Noxious weeds refers to *Astragalus* spp., *Emex spinosa*, *Galium tricornutum* and *Vaccaria pyramidata*

^e Refers to triticale only

Morocco

Rice

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)	1	1	1	1
Isolation (min. meters) ^a	5	5	5	5
Other varieties (max. %)	0.05	0.1	0.2	0.3
Other species (max.) ^b	1/15000	1/10000	1/5000	1/2000
Noxious weeds (max.)				
Infected plants (max.) ^c	1/10000	1/5000	1/2000	1/1000
Seed Standards				
Pure seed (min. %)	98.5	98.5	98	
Other crop seeds (max. %)				
Varieties (no/1000 seeds)	1	1	3	
Weed seeds (max. no/kg)	6	8	10	
Red grains	1	2	5	
<i>Panicum</i>	0	0	3	
Infected seeds (max. %)				
Live insects	0	0	0	
Insect damage	0.1	0.1	0.1	
Germination (min. %)	80	80	80	
Moisture content (max. %)	15	15	15	

^a (Not for Rye) Isolation for same or higher category of the same species; 2-4 m for other species and 150 m for field of same species with 0.1% of smut for pre-basic seed, 0.2% for basic seed, 0.3% for certified 1 and 0.5% for certified 2

^b Impurities of other crop species refers to all cereal species other than the crop in question (e.g. in rice: barley, oat, wheat, rye and triticale)

^c *Pyriculariza* spp.

Morocco

Legumes (Beans, Chickpea, Lentil, Faba bean, Pea)

Standards	Seed Classes		
	Basic	Certified 1	Certified 2
Field Standards			
Rotation (min. years)	2	2	2
Isolation (min. meter) ^a			
Other varieties (max. % per 1000)	0	0	0
Other species (max. no.) ^b	1/25m ²	1/10m ²	1/5m ²
Noxious weeds (max. no.)			
Cuscuta	None	None	None
Orobanche	1/100m ²	1/100m ²	3/100m ²
Infected plants (total %)	1.0	1.5	3
Ascochyta	0.3	0.5	1
Bacterial diseases	1	1	2
Virus infected plants	0.5	1	2
Seed Standards			
Pure seed (min. %)	98	97	
Other crop seeds (max. %)	0.2	0.5	
Weed seeds (max. no/100 gm)			
Cuscuta	0.0	0.0	
Orobanche	0.0	0.0	
Infected seeds (max. %) ^c			
Bruchid damage seed	3	5	
Germination (min. %) ^c	85	85	
Moisture content (max. %)			

^a Isolation: Beans, Chickpea, Lentil, and Pea: Pre-basic 1 (G₁)=200m; Pre-basic 2 (G₂, G₃ and G₄)=50m; Certified 1 and certified 2=25m. In case early generation seed is isolated by a later generation (e.g. G₁ by G₂) the distance between two can be reduced to 4 m and the outside generation should be isolated from any variety of the same species by at least 50 m

Faba bean and field bean: Pre-basic 1 (G₁) and pre-basic 2 (G₂)=400m; pre-basic 3(G₃) and basic (G₄)=300m; Certified 1 (R₁)= 200m; and certified 2 (R₂)= 150 m

^b Other crop species are in:

Faba bean (large seeded): faba bean (small seeded), *Lathyrus*, lupin

Faba bean (small seeded): Faba bean (large seeded), *Lathyrus* and lupin.

Chickpea: Faba bean (small seeded), Phaseolus bean

Haricot: Chickpea, lupin, Faba bean(small seeded)

Pea: *Lathyrus*, Vetch

^c No live insects are allowed

^d Hard seed expected to germinate for faba bean and phaseolus bean is 20 %

Morocco

Linseed

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)				
Isolation (min. meters)	300/600	150/400	100/200	
Other varieties (max. %)		0.2	0.5	1
Other species (max. no.)				
Noxious weeds (max. no/m ²)				
Infected plants (max. no.)		1/100	2/100	
Seed Standards				
Pure seed (min. %)		99	98	97
Other crop seeds (max. %)		0.2	0.2	0.3
Varietal purity (min. %)		99.8	99.5	99
Weed seeds (max. no/kg)				
<i>Cuscuta</i>		None	None	None
<i>Orobancha</i>		None	None	None
Infected seeds (max. %)				
<i>Botrytis cinerea</i>		5	5	5
<i>Fusarium</i>		5	5	5
Germination (min. %)		85	85	85
Moisture content (max. %)		12	12	12

Morocco*Rape seed*

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)	3	3	3	
Isolation (min. meters)	500/1000	500/1000	200/400	
Other varieties (max. %)		0.1	1	
Other species (max. no.)				
Noxious weeds (max. no/m ²)				
<i>Brassica</i> spp		2/100	8/100	
<i>Sinapis</i> spp and <i>Raphanus</i>		3/10	9/10	
Infected plants (max. no.)				
Seed Standards				
Pure seed (min. %)		98	97	
Other crop seeds (max. %)		0.2	0.2	
Varietal purity (min. %)		99.9	99	
Weed seeds (max. no/kg)				
Infected seeds (max. %)				
<i>Sclerotinia sclerotium?</i>		1	2	
Germination (min. %)		85	85	
Moisture content (max. %)		10	10	

Morocco*Sunflower*

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)				
Isolation (min. meters)	500/1000	500/1000	200/400	
Other varieties (max. %)		0.1	1	
Other species (max. no.)				
Noxious weeds (max. no/m ²)				
Infected plants (max. no.)				
Seed Standards				
Pure seed (min. %)		98	97	
Other crop seeds (max. %)		0.2	0.2	
Varietal purity (min. %)		99.9	99	
Weed seeds (max. no/kg)				
Infected seeds (max. %)				
<i>Botrytis cinerea</i>		1	3	
<i>Sclerotinia sclerotium</i> (%/500g)		1	2	
Germination (min. %)		85	85	
Moisture content (max. %)		9	9	

Morocco*Cotton*

Standards	Seed Classes	
	Basic	Certified
Field Standards		
Rotation (min. years)		
Isolation (min. meters) ^a	500	300
Other varieties (max. %)	0.1	0.3
Other species (max. no.)		
Noxious weeds (max. no.)		
Infected plants(max % per 1000)		
Bacteria	0.1	0.1
Fan leaf	0.5	0.5
Viruses	5.0	5.0
Seed Standards		
Pure seed (min. %)	98.5	98
Other crop seeds (max. %)	0.3	0.3
Weed seeds (max. %)		
Infected seeds (max. %)		
Insect damage	1.0	2
Germination (min. %)	80	80
Moisture content (max. %)	12	12

^a Pre-basic (G₁, G₂, G₃) and basic (G₄) seed should be isolated from each other by 10m from the same variety or completely isolated in a field of another crop

NB: Minimum field size is 10 ha and seed producers are authorized to produce only one variety

Morocco

Sugar beet

Standards	Seed Classes	
	Basic	Certified
Field Standards		
Rotation (min. years)		
Isolation (min. meters) ^a	1000	1000
Other varieties (max. %)	1	3
Other species (max. no.)		
Noxious weeds (max. no.)		
Infected plants (max. %)		
Seed Standards		
Pure seed (min. %)	97	97
Other crop seeds (max. %)	0.3	0.3
Weed seeds (max. %)	0.1	0.1
Infected seeds (max. %)		
Germination (min. %)		
Monogerm	80	80
Multigerm	70	70
Moisture content (max. %)	15	15
Seed size (%)		
< 2.5 mm length & 3.2 mm width	3	3
> 8 mm width	0	0

^a Isolation for pre-basic and basic seed is 500m and for certified seed is 300m from any variety of the same species

NB: Minimum field size is 0.5 ha and seed producers are authorized to produce only one variety

Morocco

Potato

Standards	Seed Classes				
	Pre-basic	Super elite ^a	Basic Elite ^b	Class A ^c	Certified Class B ^d
Field Standards					
Rotation (min. years)	4	4	4	3	3
Isolation (min. meter) ^e					
Other varieties (max. %)	0	0.1	0.2	0.5	1
Infected plants (max %)					
(a) Bacteria					
Black leg	0	0.1	0.5	1	2
Brown rot	0	0	0	0	0
(b) Fungal diseases					
<i>Rhizoctonia</i> spp	1	5	6	8	12
<i>Verticillium</i> spp	0.2	0.5	1	3	5
(c) Virus diseases	0	0.5	1	2	4
(d) Stunted plants	2	None	None	None	None
Seed Standards (tubers)					
Varietal purity (max, %)	0	0.1	0.2	0.5	1
Diseases (max, %)					
Brown rot	0	0	0	0	0
Common scab or silver scurf	2	2	2	2	2
Fusarium wilt	2	2	2	2	2
Late blight	2	2	2	2	2
Powdery scab	0	0	0	0	0
Wart	0	0	0	0	0
Golden Nematode	0	0	0	0	0
Tuber moth	0	0	0	0	0
Others (max %)					
Inert matter (max. %)	2	2	2	2	2
Injured tubers	3	3	3	3	3
Insects	5	5	5	5	5
Tubers out of caliber	6	6	6	6	6

^{ab} Standards to met during the third (last) visit

^{c,d} Standards to met during the second (last) visit.

^e Isolation standards is given in the table below

Class	Young families	Super elite	Elite	Certified A & B	Field of <i>Solanaceae</i> , <i>Cruciferae</i> or stone fruit trees
Young families	1 Empty row	20 m	30 m	40 m	500 m
Super elite	20 m	1 empty row	20 m	30 m	400 m
Elite	30 m	20 m	1 empty row	20 m	300 m
Certified A & B	40 m	30 m	20 m	1 empty row	200 m

NB: The total of diseases and others should not exceed 10%

Morocco¹*Vegetables*

Crops	Seed Standards					
	Basic			Certified		
	Purity (min.)	Other crop seed (max.)	Germination (min.)	Purity (min.)	Other crop seed (max.)	Germination (min.)
	%					
Beans	97	0.1	80	97	0.1	80
Cabbage	97	1.0	75	97	1.0	75
Carrot	95	1.0	66	95	1.0	66
Cucumber	97	0.1	75	97	0.1	75
Egg plant	95	0.5	66	95	0.5	66
Onion	97	0.1	75	97	0.1	75
Onion	96	0.5	70	96	0.5	70
Pepper	96	0.5	65	96	0.5	65
Tomato	95	0.5	Sc	95	0.5	80
Water melon	96	0.1	72	96	0.1	72

¹ For vegetable crops there is no official quality control in the field and the responsibility rests with the producer. The seed lot should meet the prescribed quality standards, packaged in new bags and labeled with the following information (name and address of the producer, date of sealing, species name; variety name, standard, lot number weight treatment and limited ate of use)

Morocco

Alfalfa

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)	2	2	2	
Isolation (min. meters)	500	300	100	
Other varieties (max. no/m ²)		None	1/1?	
Other species (max. no/m ²)	1/25	1/25	1/8	
<i>Chenopodiacea</i>	1/5	1/5	1/10	
Noxious weeds (max. no/m ²)				
<i>Cuscuta</i>	None	None	None	
<i>Orobanche</i>	None	None	None	
Infected plants (max. no.)				
Seed Standards				
Pure seed (min. %)		98	97	
Other crop seeds (max. no/50g)				
Clover		4	10	
Melilotus		4	10	
Varietal purity (min. %)				
Weed seeds (max. %)		0.2	0.5	
<i>Cuscuta</i> (max. no/50g)		None	None	
<i>Orobanche</i> (max. no/50g)		None	None	
Infected seeds (max. %)				
Germination (min. %)		80	80	
Moisture content (max. %)				

Morocco

Clover

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)	2	2	2	
Isolation (min. meters)	300	300	100	
Other varieties (max. %)	0.2	0.2	2	
Other species (max. no/m ²)	1/25	1/25	1/8	
<i>Chenopodiacea</i>	1/5	1/5	1/10	
Noxious weeds (max. no/m ²)				
<i>Orobanche</i>	None	None	None	
Infected plants (max. no.)				
Seed Standards				
Pure seed (min. %)		98	97	
Other crop seeds (max. no/50g)				
Clover		4	10	
Melilotus		4	10	
Varietal purity (min. %)				
Weed seeds (max. %)		0.2	0.5	
<i>Cuscuta</i> (max. no/50g)		None	None	
<i>Orobanche</i> (max. no/50g)		None	None	
Infected seeds (max. %)				
Germination (min. %)		80	80	
Moisture content (max. %)				

Morocco

Oats

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)				
Isolation (min. meters)				
Other varieties (max. no/m ²) ^a	0.05	0.1	0.2	0.3
Other species (max. no)	1/15000	1/10000	1/5000	1/2000
Noxious weeds (max. no/m ²) ^b				
Infected plants (max. no.)	1/10000	1/5000	1/2000	1/1000
Seed Standards				
Pure seed (min. %)	99	99	98.5	98
Other crop seeds (max. no/kg)				
Other varieties (max. no/1000 seeds)	1	1	2	3
Weed seeds (max. no/kg)	6	8	20	30
Cereals	1	2	12	15
Wild oats	1	2	3	4
Noxious weeds ^c	3	4	6	8
Infested seed (max. %)				
Live insects	None	None	None	None
Insect damage (max. %)	0.1	0.1	0.1	0.1
Germination (min. %)	85	85	85	85
Moisture content (max. %)	14	14	14	14
Specific gravity (min)	50	50	50	50

^a Isolation for same or higher category of the same species; 2-4 m for other species and 150 m for field of same species with 0.1% smut infection for pre-basic seed, 0.2% for basic seed, 0.3% for certified 1 and 0.5% for certified 2

^b Impurities of other crop species refers to all cereal species other than the crop in question (e.g. in oats: barley, wheat, rye and triticale)

^c Noxious weeds refers to *Astragalus* spp., *Emex spinosa*, *Galium tricornutum* and *Vaccaria pyramidata*

Morocco

Vetch

Standards	Seed Classes			
	Pre-basic	Basic	Certified 1	Certified 2
Field Standards				
Rotation (min. years)	2	2	2	2
Isolation (min. meters)	100	100	50	50
Other varieties (max. %)	0.2	0.2	2	
Other species (max. no/m ²)	1/25	1/25	1/8	
Noxious weeds (max. no/m ²)				
<i>Orobanche</i>	1/100	1/1000	2/100	
Infected plants (max. no.)				
Seed Standards				
Pure seed (min. %)		98	97	
Other crop seeds (max. %)				
Varietal purity (min. %)				
Weed seeds (max. %)		0.2	0.5	
<i>Cuscuta</i> (max. no/50g)		None	None	
<i>Orobanche</i> (max. no/50g)		None	None	
Infested seed (max. %)				
Live insects		None	None	
Insect damage (max. %)		3	5	
Germination (min. %)		85	85	
Moisture content (max. %)				