

ACUTE**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium to long
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium to long
Curvature of first segment	medium to strong

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak (1-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak
Lemma nerves - at early dough	medium
Awn tips	weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	strong
Ear - glaucosity	medium to strong
Ear - attitude 21 days after ear emerg.	semi-erect

ARCHER**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax to medium
Length	medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	long
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	parallel to weakly divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	weakly coloured
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak (1-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	semi-prostrate to prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	semi-erect

CADILLAC**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium to long
Curvature of first segment	medium to strong

Spikelet

Sterile spikelet - attitude	parallel
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak (1-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	very weak to weak

Plant growth characters

Plant - growth habit	semi-prostrate
Plant - length	medium to long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	semi-erect

CALIFORNIA**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium to long
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	long
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	absent
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	semi-erect

CAMION**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax to medium
Length	long
Shape	tapering

Awn

Length compared to ear	+/- equal to longer
------------------------	---------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium to strong

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak to medium
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak
Lemma nerves - at early dough	weak
Awn tips	weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	very early to early
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	weak
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

CAMPANILE

CHARACTERS IN DETAIL

Ear

Number of rows	two
Density	medium to dense
Length	medium to long
Shape	tapering

Awn

Length compared to ear	short (shorter than ear)
------------------------	--------------------------

Rachis

Length of first segment	medium to long
Curvature of first segment	medium to strong

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn of grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	medium to strong
Rachilla hair type	short
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	horizontal to semi-recurved

CARAT**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax to medium
Length	medium
Shape	tapering

Awn

Length compared to ear	long (longer than ear)
------------------------	------------------------

Rachis

Length of first segment	short to medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	
Lemma nerves - at early dough	absent or very weak
Awn tips	

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	strong to very strong
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	horizontal to semi-recurved

CASSATA**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium to dense
Length	medium
Shape	tapering

Awn

Length compared to ear	+/- equal to longer
------------------------	---------------------

Rachis

Length of first segment	short to medium
Curvature of first segment	weak to medium

Spikelet

Sterile spikelet - attitude	parallel
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	absent (grains thresh free)
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak to medium
Lemma nerves - at early dough	weak
Awn tips	medium to strong

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	erect to semi-erect

CAVALIER**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	parallel
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	medium to strong
Lemma nerves - at early dough	strong to very strong
Awn tips	strong to very strong

Plant growth characters

Plant - growth habit	semi-prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early to medium
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	semi-erect

CYPRESS**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak (1-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	medium
Lemma nerves - at early dough	strong
Awn tips	strong

Plant growth characters

Plant - growth habit	semi-prostrate to prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	semi-recurved

ESCADRE**CHARACTERS IN DETAIL****Ear**

Number of rows	six
Density	dense
Length	short
Shape	parallel

Awn

Length compared to ear	+/- equal to longer
------------------------	---------------------

Rachis

Length of first segment	short to medium
Curvature of first segment	very weak

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	n/a
Median spikelet - length of glume+awn cf grain	longer

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong to v. strong
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak
Lemma nerves - at early dough	weak to medium
Awn tips	weak to medium

Plant growth characters

Plant - growth habit	intermediate
Plant - length	long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

FENTARA**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium to long
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium to long
Curvature of first segment	weak

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak (1-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	semi-prostrate
Plant - length	medium to long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	erect to semi-erect

FLAGON**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax to medium
Length	long
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak (1-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	medium to long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	horizontal to semi-recurved

FLORENTINE**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium to long
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium to strong

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	medium
Lemma nerves - at early dough	medium
Awn tips	medium

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	weak
Ear - attitude 21 days after ear emerg.	semi-erect

CHARACTERS IN DETAIL**Ear**

Number of rows	six
Density	lax to medium
Length	short
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	weak to medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	n/a
Median spikelet - length of glume+awn cf grain	longer

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early to medium
Flag leaf - glaucosity of sheath	strong
Ear - glaucosity	strong
Ear - attitude 21 days after ear emerg.	semi-erect

CHARACTERS IN DETAIL**Ear**

Number of rows	six
Density	lax
Length	medium
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	absent

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	n/a
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	very strong (>10 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short
Lower leaf - hairiness of sheaths	present
Time of ear emergence	very early to early
Flag leaf - glaucosity of sheath	strong to very strong
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	erect to semi-erect

HARLEQUIN**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium
Shape	tapering

Awn

Length compared to ear	shorter to +/- equal
------------------------	----------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	parallel
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	v. weak to weak
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	semi-prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early to medium
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

KWS CASSIA**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	short
Curvature of first segment	weak to medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	very weak to weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	semi-erect to intermediate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

KWS GLACIER**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	medium to strong
Ear - attitude 21 days after ear emerg.	erect to semi-erect

KWS JOY**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	long
Curvature of first segment	strong

Spikelet

Sterile spikelet - attitude	parallel to weakly divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	medium (3-5 per nerve)
Rachilla hair type	short
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short
Lower leaf - hairiness of sheaths	present
Time of ear emergence	late
Flag leaf - glaucosity of sheath	strong
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	semi-erect

KWS MERIDIAN**CHARACTERS IN DETAIL****Ear**

Number of rows	six
Density	medium
Length	short to medium
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	strong

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	n/a
Median spikelet - length of glume+awn cf grain	longer

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong to v. strong
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	semi-erect to intermediate
Plant - length	medium to long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	strong
Ear - glaucosity	medium to strong
Ear - attitude 21 days after ear emerg.	semi-erect

MARIS OTTER**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium to long
Shape	parallel

Awn

Length compared to ear	long (longer than ear)
------------------------	------------------------

Rachis

Length of first segment	medium to long
Curvature of first segment	weak to medium

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	strong
Lemma nerves - at early dough	medium
Awn tips	medium

Plant growth characters

Plant - growth habit	semi-prostrate to prostrate
Plant - length	short
Lower leaf - hairiness of sheaths	present
Time of ear emergence	late to very late
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	horizontal

MATROS**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax to medium
Length	medium to long
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	short to medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	very strong
Lemma nerves - at early dough	strong to very strong
Awn tips	strong to very strong

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	strong
Ear - attitude 21 days after ear emerg.	semi-recurved to recurved

MEZMAAR**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	short to medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	erect to semi-erect

MT0471**CHARACTERS IN DETAIL****Ear**

Number of rows	six
Density	dense
Length	short
Shape	parallel

Awn

Length compared to ear	long (longer than ear)
------------------------	------------------------

Rachis

Length of first segment	medium
Curvature of first segment	very weak

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	n/a
Median spikelet - length of glume+awn cf grain	longer

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong to v. strong
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early
Flag leaf - glaucosity of sheath	strong to very strong
Ear - glaucosity	medium to strong
Ear - attitude 21 days after ear emerg.	erect to semi-erect

CHARACTERS IN DETAIL**Ear**

Number of rows	six
Density	medium
Length	medium
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	short to medium
Curvature of first segment	very weak

Spikelet

Sterile spikelet - attitude	
Sterile spikelet - development	
Median spikelet - length of glume+awn cf grain	shorter

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	very weak to weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	semi-prostrate
Plant - length	short
Lower leaf - hairiness of sheaths	present
Time of ear emergence	very early
Flag leaf - glaucosity of sheath	very strong
Ear - glaucosity	strong
Ear - attitude 21 days after ear emerg.	semi-erect

PEARL**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium to long
Shape	tapering

Awn

Length compared to ear	long (longer than ear)
------------------------	------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	medium (3-5 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	medium to strong
Lemma nerves - at early dough	very weak to weak
Awn tips	weak to medium

Plant growth characters

Plant - growth habit	intermediate
Plant - length	medium to long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	late
Flag leaf - glaucosity of sheath	strong to very strong
Ear - glaucosity	strong
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

PURDEY**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium to long
Shape	parallel

Awn

Length compared to ear	shorter to +/- equal
------------------------	----------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	parallel to weakly divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	weakly coloured
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	semi-prostrate to prostrate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	strong
Ear - glaucosity	weak
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

CHARACTERS IN DETAIL**Ear**

Number of rows	six
Density	medium
Length	medium
Shape	parallel

Awn

Length compared to ear	long (longer than ear)
------------------------	------------------------

Rachis

Length of first segment	short to medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	n/a
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	weakly coloured
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	short
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak
Lemma nerves - at early dough	weak to medium
Awn tips	weak to medium

Plant growth characters

Plant - growth habit	intermediate
Plant - length	medium to long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	very late
Flag leaf - glaucosity of sheath	weak to medium
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

RE15

CHARACTERS IN DETAIL**Ear**

Number of rows	six
Density	medium
Length	medium
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	short
Curvature of first segment	weak to medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	n/a
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	short
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak
Lemma nerves - at early dough	weak
Awn tips	medium

Plant growth characters

Plant - growth habit	semi-prostrate
Plant - length	medium to long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early
Flag leaf - glaucosity of sheath	strong
Ear - glaucosity	medium to strong
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

RETRIEVER**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	medium to strong
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	medium
Lemma nerves - at early dough	strong
Awn tips	strong

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	semi-erect

SAFFRON**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	short to medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak to medium
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	
Lemma nerves - at early dough	absent or very weak
Awn tips	

Plant growth characters

Plant - growth habit	intermediate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	absent or very weak
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

SEQUEL**CHARACTERS IN DETAIL****Ear**

Number of rows	six
Density	medium
Length	short to medium
Shape	tapering to parallel

Awn

Length compared to ear	long (longer than ear)
------------------------	------------------------

Rachis

Length of first segment	short
Curvature of first segment	weak

Spikelet

Sterile spikelet - attitude	
Sterile spikelet - development	
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak to medium
Lemma nerves - at early dough	weak
Awn tips	weak to medium

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	medium to strong
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

SINATRA**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium to long
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	parallel to weakly divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	present
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	semi-erect

SOLOMAN**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	strongly coloured ("blue")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	short
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	strong to very strong
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	erect to semi-erect

SUZUKA**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium
Shape	tapering to parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	short to medium
Curvature of first segment	medium

Spikelet

Sterile spikelet - attitude	parallel
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	weakly coloured
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak to medium
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early
Flag leaf - glaucosity of sheath	weak to medium
Ear - glaucosity	weak
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

SY VENTURE**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium
Shape	tapering

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	medium to strong

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	strong (5-10 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	strong
Lemma nerves - at early dough	very strong
Awn tips	strong

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	erect to semi-erect

TALISMAN**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	medium to long
Shape	tapering

Awn

Length compared to ear	short (shorter than ear)
------------------------	--------------------------

Rachis

Length of first segment	medium to long
Curvature of first segment	medium to strong

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak (1-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	strong
Lemma nerves - at early dough	strong
Awn tips	strong

Plant growth characters

Plant - growth habit	intermediate
Plant - length	short to medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	medium to strong
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	erect to semi-erect

TETRIS**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	lax
Length	long
Shape	tapering

Awn

Length compared to ear	short (shorter than ear)
------------------------	--------------------------

Rachis

Length of first segment	medium to long
Curvature of first segment	medium to strong

Spikelet

Sterile spikelet - attitude	n/a
Sterile spikelet - development	none or rudimentary(deficiens)
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	absent/v. weak (0-2 per nerve)
Rachilla hair type	long
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak to medium
Lemma nerves - at early dough	strong to very strong
Awn tips	strong

Plant growth characters

Plant - growth habit	semi-prostrate
Plant - length	medium to long
Lower leaf - hairiness of sheaths	present
Time of ear emergence	early to medium
Flag leaf - glaucosity of sheath	medium
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	semi-erect

WINSOME**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium
Shape	parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	strong

Spikelet

Sterile spikelet - attitude	divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	whitish ("white")
Husk - presence after harvest	present
Spiculation of inner lateral nerves	v. weak to weak
Rachilla hair type	short
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	weak to medium
Lemma nerves - at early dough	medium to strong
Awn tips	strong

Plant growth characters

Plant - growth habit	semi-prostrate
Plant - length	medium
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium
Flag leaf - glaucosity of sheath	strong
Ear - glaucosity	weak to medium
Ear - attitude 21 days after ear emerg.	semi-erect to horizontal

WINTMALT**CHARACTERS IN DETAIL****Ear**

Number of rows	two
Density	medium
Length	medium to long
Shape	tapering to parallel

Awn

Length compared to ear	medium (+/- equal to ear)
------------------------	---------------------------

Rachis

Length of first segment	medium
Curvature of first segment	strong

Spikelet

Sterile spikelet - attitude	parallel to weakly divergent
Sterile spikelet - development	full
Median spikelet - length of glume+awn cf grain	equal

Grain

Kernel - colour of aleurone layer	weakly coloured
Husk - presence after harvest	present
Spiculation of inner lateral nerves	weak (1-2 per nerve)
Rachilla hair type	short
Ventral furrow - presence of hairs	absent
Disposition of lodicules	clasping ("collar" type)

Anthocyanin colouration

Flag leaf - auricles	absent to very weak
Lemma nerves - at early dough	absent or very weak
Awn tips	absent to very weak

Plant growth characters

Plant - growth habit	intermediate to semi-prostrate
Plant - length	short
Lower leaf - hairiness of sheaths	present
Time of ear emergence	medium to late
Flag leaf - glaucosity of sheath	strong
Ear - glaucosity	medium
Ear - attitude 21 days after ear emerg.	semi-erect