



APPLICATIONS UNDER EXAMINATION

LETTUCE

LETTUCE
(Lactuca sativa)

Proposed denomination: 'PS6545701'
Application number: 04-4314
Application date: 2004/05/26 (priority claimed)
Applicant: Seminis Vegetable Seeds, Inc., Oxnard, California, United States of America
Agent in Canada: Seminis Vegetable Seeds, Inc., Ancaster, Ontario
Breeder: Seminis Vegetable Seeds, Inc., Oxnard, California, United States of America

Variety used for comparison: 'Green Towers'

Summary: *The leaf of 'PS6545701' is obovate in shape whereas it is elliptic in 'Green Towers'. The upper side of the leaves of 'PS6545701' have weak to medium glossiness whereas it is very weak on 'Green Towers'. The margins of 'PS6545701' have strong undulation whereas it is very weak on 'Green Towers'. The depth and density of incisions on the apical parts of the margins of 'PS6545701' are medium whereas they are shallow and sparse on 'Green Towers'. Seed colour of 'PS6545701' is black whereas it is white in 'Green Towers'.*

Description:

SEEDLING: absent or very weak anthocyanin colouration
 COTYLEDONS: small to medium size, elliptic shape

PLANT: romaine type

OUTER LEAVES: greyish-green to bluish green, medium to dark intensity of colour

LEAF: thick, obovate shape, no anthocyanin colouration, weak to medium glossiness, concave to flat surface profile, entire

ATTITUDE: semi-erect at 10-12 leaf stage, erect to semi-erect at harvest maturity

BLISTERING: very weak, small blisters

LEAF BLADE: entire, strong undulation of margins, flabellate (fan-shaped) venation

MARGINS INCISIONS AT APEX: medium depth, medium density

SEED: black

Origin and Breeding: 'PS6545701' was derived from crossing 'PI206964' with 'Salinas 88' in 1993 at the Seminis Vegetable Seed Research Station in Arroyo Grande, California, USA. Pedigree selection breeding method was used, using both single plant selection and mass selection practices. Selection criteria for 'PS6545701' included choosing a variety that appeared like romaine lettuce yet exhibited internal characteristics of an iceberg variety such as colour, texture, taste and density as well as contrasting inner and outer leaf colour.

Tests and Trials: The tests and trials for 'PS6545701' were conducted at Bank Gardens, Lynden, Ontario and Princeton, Ontario during the summers of 2007 and 2008. The trials consisted of a minimum of 105 plants, across a minimum of 3 replicates. Plants were spaced at 15 and 25 centimetre spacings, with a row spacing of 75 centimetres. Measured characteristics were based on 10 measurements.

Comparison table for 'PS6545701'

	'PS6545701'	'Green Towers'*
<i>Plant diameter (cm)</i>		
mean	29.5	30.8
std. deviation	2.9	3.9
<i>Days to beginning of bolting under long day conditions</i>		
number of days	53	54

Days to harvest maturity
 number of days 45 45
 *reference variety



Lettuce: 'PS654701' (left) with reference variety 'Green Towers' (right)

Proposed denomination: 'Red Bull'
Application number: 05-4623
Application date: 2004/12/17 (priority claimed)
Applicant: Seminis Vegetable Seeds, Inc., Oxnard, California, United States of America
Agent in Canada: Seminis Vegetable Seeds, Inc., Ancaster, Ontario
Breeder: Seminis Vegetable Seeds, Inc., Oxnard, California, United States of America

Variety used for comparison: 'Red Tide'

Summary: *The leaves of 'Red Bull' are obovate in shape whereas they are elliptic to broad elliptic in 'Red Tide'. 'Red Bull' has strong glossiness and blistering on the upper side of the leaves whereas it is medium on the leaves of 'Red Bull'. The plants of 'Red Bull' are narrower than those of 'Red Tide'.*

Description:

SEEDLING: very weak anthocyanin colouration
 COTYLEDONS: small to medium size, elliptic shape

PLANT: leaf type

OUTER LEAVES: reddish, medium intensity of colour

LEAF: medium thickness, obovate shape, medium to strong anthocyanin colouration diffused on the upper third of the blade, strong glossiness, concave profile

ATTITUDE: semi-erect at 10-12 leaf stage and at harvest maturity

BLISTERING: strong, medium size blisters

LEAF BLADE: entire, medium to strong undulation of margins, not flabellate (fan-shaped) venation

MARGINS INCISIONS AT APEX: shallow, sparse

SEED: white

Origin and Breeding: 'Red Bull' was derived from crossing 'PI171676A' with 'SVR920528' in 1996 at the Seminis Vegetable Seed Research Station in Arroyo Grande, California, USA. Pedigree selection breeding method was used, using

both single plant selection and mass selection practices. Selection criteria for 'Red Bull' included uniformity and improved heading ability, increased plant weight and leaf count and resistance to premature stem elongation (bolting).

Tests and Trials: The tests and trials for 'Red Bull' were conducted at Bank Gardens, Lynden, Ontario and Princeton, Ontario during the summers of 2007 and 2008. The trials consisted of a minimum of 105 plants, across a minimum of 3 replicates. Plants were spaced at 15 and 25 centimetre spacings, with a row spacing of 75 centimetres. Measured characteristics were based on 10 measurements.

Comparison table for 'Red Bull'

	'Red Bull'	'Red Tide'*
<i>Plant diameter (cm)</i>		
mean	28.4	35.3
std. deviation	2.1	2.5
<i>Days to beginning of bolting under long day conditions</i>		
number of days	53	54
<i>Days to harvest maturity</i>		
number of days	45	45

*reference variety



Lettuce: 'Red Bull' (left) with reference variety 'Red Tide' (right)

Proposed denomination: 'Valley Heart'
Application number: 05-4622
Application date: 2004/12/17 (priority claimed)
Applicant: Seminis Vegetable Seeds, Inc., Oxnard, California, United States of America
Agent in Canada: Seminis Vegetable Seeds, Inc., Ancaster, Ontario
Breeder: Seminis Vegetable Seeds, Inc., Oxnard, California, United States of America

Variety used for comparison: 'King Henry'

Summary: *The seeds of 'Valley Heart' are white whereas they are black in 'King Henry'.*

Description:

SEEDLING: absent or very weak anthocyanin colouration

COTYLEDONS: small to medium size, elliptic shape

PLANT: romaine type

OUTER LEAVES: green, medium intensity of colour

LEAF: medium thickness, elliptic shape, no anthocyanin colouration, medium glossiness, flat profile, entire

ATTITUDE: erect at 10-12 leaf stage, erect to semi-erect at harvest maturity

BLISTERING: weak to medium, small to medium size blisters

LEAF BLADE: entire, very weak undulation of margins, not flabellate (fan-shaped) venation

MARGINS INCISIONS AT APEX: shallow, sparse

SEED: white

Origin and Breeding: 'Valley Heart' was derived from crossing 'Bautista' with 'Green Towers' in 1998 at the Seminis Vegetable Seed Research Station in Arroyo Grande, California, USA. Pedigree selection breeding method was used, using both single plant selection and mass selection practices. Selection criteria for 'Valley Heart' included uniformity and improved heading ability, adapted to the growing conditions of California and Arizona, and an increased ability to produce romaine hearts.

Tests and Trials: The tests and trials for 'Valley Heart' were conducted at Bank Gardens, Lynden, Ontario and Princeton, Ontario during the summers of 2007 and 2008. The trials consisted of a minimum of 105 plants, across a minimum of 3 replicates. Plants were spaced at 15 and 25 centimetre spacings, with a row spacing of 75 centimetres. Measured characteristics were based on 10 measurements.

Comparison table for 'Valley Heart'

	'Valley Heart'	'King Henry'*
<i>Plant diameter (cm)</i>		
mean	30.4	29.6
std. deviation	1.6	3.8
<i>Days to beginning of bolting under long day conditions</i>		
number of days	52	52
<i>Days to harvest maturity</i>		
number of days	45	45

*reference variety



Lettuce: 'Valley Heart' (left) with reference variety 'King Henry' (right)