



APPLICATIONS UNDER EXAMINATION

BEAN

BEAN
(Phaseolus vulgaris)

Proposed denomination: 'Mariah'
Application number: 07-5930
Application date: 2007/06/18
Applicant: Seminis Vegetable Seeds, Inc., Oxnard, California, United States of America
Agent in Canada: John A. Zink, Chatham, Ontario
Breeder: David Webster, Seminis Vegetable Seeds, Inc., Filer, Idaho, United States of America

Varieties used for comparison: 'La Paz' and 'Pintoba'

Summary: 'Mariah' has an indeterminate bush habit with erect stem and branches with guides and the ability to climb whereas 'Pintoba' has an indeterminate bush habit with weak and prostrate stem and branches with long guides with the ability to climb. The hilar ring of 'Mariah' is yellow whereas it is self-coloured on 'Pintoba'. 'Mariah' has 'I' resistance to bean common mosaic virus, NL3 strain whereas 'La Paz' and 'Pintoba' are susceptible. 'Mariah' matures earlier than both reference varieties.

Description:

PLANT: anthocyanin colouration of hypocotyl absent, indeterminate bush habit with erect stem and branches with guides and ability to climb, climbing starts mid-season

LEAF: medium green, medium rugosity

FLOWER: medium sized bracts, white standard and wings

POD: red pigmentation, sparse flecks, slight to medium curvature towards ventral part, medium length beak

SEED: ovate shape of median longitudinal section, multi-coloured, main colour buff with more than one secondary colour, weak veins, yellow hilar ring

SECONDARY COLOUR: mainly brown, speckled pattern, randomly scattered

DISEASE REACTION: Resistant to Bean common mosaic virus (BCMV), NY15 strain and 'I' resistance to NL3 strain present, resistant to rust (*Uromyces appendiculatus*) race 53

Origin and Breeding: 'Mariah' was developed by pedigree selection from the cross 'H9657-42-2', as the seed parent, and 'Buster', the pollen parent, made in January, 2000 at the Seminis Western Breeding Station in Filer, Idaho, USA. The F1 was planted out in the field that year and allowed to multiply. Early selections were made during the F2 for upright productive structure and desirable seed appearance. Bulking of successive generations along with additional selection for resistance to weathering when exposed to light and moisture, maturity, uniform ripening and yield potential were carried out. 'Mariah' was tested as 'EX08540800'.

Tests and Trials: The tests and trials for 'Mariah' were conducted at Parent Seeds, St. Joseph, Manitoba during the summers of 2007 and 2008. Trials consisted of 2 replicates per variety, consisting of 2 rows per replicate, measuring approximately 6.5 metres in length, with a row spacing of approximately 1 metre. Plants were spaced about 5 cm apart in the rows. Maturity data were extracted from the 2006 and 2007 Manitoba Dry Bean Cooperative Registration Trials.

Comparison table for 'Mariah'

	'Mariah'	'La Paz'*	'Pintoba'*
Days to maturity			
mean	91.88	97.5	99.13

Seed weight (grams per 1000 seeds)
 mean 357.5 380 382.5

*reference varieties



Bean: Candidate variety, 'Mariah' ('08540800')



Bean: Reference variety, 'Pintoba'



Bean: Reference variety, 'La Paz'

Proposed denomination: 'Medicine Hat'
Application number: 07-5931
Application date: 2007/06/18
Applicant: Seminis Vegetable Seeds, Inc., Oxnard, California, United States of America
Agent in Canada: John A. Zink, Chatham, Ontario
Breeder: David Webster, Seminis Vegetable Seeds, Inc., Filer, Idaho, United States of America

Varieties used for comparison: 'La Paz' and 'Pintoba'

Summary: *'Medicine Hat' has an indeterminate bush habit with erect stem and branches with guides and the ability to climb whereas 'Pintoba' has an indeterminate bush habit with weak and prostrate stem and branches and long guides with the ability to climb. The hilar ring of 'Medicine Hat' is yellow whereas it is self-coloured on 'Pintoba'. 'Medicine Hat' matures earlier than both reference varieties.*

Description:

PLANT: anthocyanin colouration of hypocotyl absent, indeterminate bush habit with erect stem and branches with guides and ability to climb, climbing starts mid-season

LEAF: medium green, medium rugosity

FLOWER: medium sized bracts, white standard and wings

POD: red pigmentation, sparse to medium flecks, slight curvature towards ventral part, medium length beak

SEED: ovate shape of median longitudinal section, multi-coloured, main colour buff with more than one secondary colour, weak veins, yellow hilar ring

SECONDARY COLOUR: mainly brown, speckled pattern, randomly scattered

DISEASE REACTION: Resistant to Bean common mosaic virus (BCMV), NY15 strain, 'I' resistance to BCMV, NL3 strain absent, resistant to rust (*Uromyces appendiculatus*) race 53

Origin and Breeding: 'Medicine Hat' was developed by pedigree selection from the cross '98yt102', as the seed parent, and 'Buster', the pollen parent, made in January, 1999 at the Seminis Western Breeding Station in Filer, Idaho, USA. The F1 was

planted out in the field that year and allowed to multiply. Early selections were made during the F2 for upright productive structure and desirable seed appearance. Bulking of successive generations along with additional selection for resistance to weathering when exposed to light and moisture, maturity, uniform ripening and yield potential were carried out. 'Medicine Hat' was tested as 'EX08550813'.

Tests and Trials: The tests and trials for 'Medicine Hat' were conducted at Parent Seeds, St. Joseph, Manitoba during the summers of 2007 and 2008. Trials consisted of 2 replicates per variety, consisting of 2 rows per replicate, measuring approximately 6.5 metres in length, with a row spacing of approximately 1 metre. Plants were spaced about 5 cm apart in the rows. Maturity data were extracted from the 2006 and 2007 Manitoba Dry Bean Cooperative Registration Trials.

Comparison table for 'Medicine Hat'

	'Medicine Hat'	'La Paz'*	'Pintoba'*
<i>Days to maturity</i>			
mean	89.88	97.5	99.13
<i>Seed weight (grams per 1000 seeds)</i>			
mean	332	380	382.5

*reference varieties



Bean: Candidate variety, 'Medicine Hat' (08550813)



Bean: Reference variety, 'Pintoba'



Bean: Reference variety, 'La Paz'