APPLICATIONS UNDER EXAMINATION

RASPBERRY

RASPBERRY (Rubus idaeus)

Proposed denomination: 'DrisRaspEighteen'

Trade name: Reyna **Application number:** 21-10488

Application date: 2020/08/26 (priority claimed)

Applicant: Driscoll's, Inc., Watsonville, California, United States of America

Agent in Canada: Lavery, De Billy, S.E.N.C.R.L. - LLP, Montreal, Quebec

Breeder: Matthias D. Vitten, Driscoll's, Inc., Watsonville, California, United States of America

Lluvia V. Gutierrez, Driscoll`s, Inc., Watsonville, California, United States of America

Kyle Rak, Driscoll's, Inc., Watsonville, California, United States of America

Luis Miguel Rodriguez Martinez, Driscoll's, Inc., Watsonville, California, United States of

America

James Heilig, Driscoll's, Inc., Watsonville, California, United States of America

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

Varieties used for comparison: 'Maravilla' and 'DrisRaspSeven' (Esperanza)

Summary: During rapid growth, the apex of the very young shoot of 'DrisRaspEighteen' has no anthocyanin colouration whereas both reference varieties have anthocyanin colouration. The current season cane of 'DrisRaspEighteen' has long internode length whereas 'Maravilla' has short to medium internode length. The current season's cane of 'DrisRaspEighteen' has a sparse arrangement of spines whereas 'DrisRaspSeven' has a dense arrangement of spines. The rugosity of the leaf of 'DrisRaspEighteen' is medium whereas that of 'Maravilla' is strong and that of 'DrisRaspSeven' is weak. The terminal leaflet of 'DrisRaspEighteen' is smaller than the terminal leaflet of both reference varieties. The fruit of 'DrisRaspEighteen' is of narrow to medium width whereas the fruit of both reference varieties is medium to broad.

Description:

PLANT: upright growth habit, very many current season's canes, bears fruit on previous season's cane in summer and on current season's cane in autumn, early to mid-season vegetative bud burst

VERY YOUNG SHOOT: no anthocyanin colouration of apex during rapid growth, early to mid-season emergence

CURRENT SEASON'S CANE: absent or very weak to medium bloom, absent or very weak intensity of anthocyanin colouration, long internode, medium to long vegetative bud, spines present

DORMANT CANE: grevish brown

SPINES ON CURRENT SEASON'S CANE: sparse, very small base, short, brownish purple

FRUITING LATERAL ON PREVIOUS SEASON'S CANE: erect attitude

PEDICEL: absent or very few spines

LEAF: medium green colour on upper side, predominantly equally three and five leaflets, medium degree of rugosity,

relative position of lateral leaflets is free LEAFLET: straight in cross-section

FLOWERING: begins mid-season on previous season's cane and early season on current season's cane

PEDUNCLE: very weak to weak intensity of anthocyanin colouration

FLOWER: small to medium sized

FRUIT RIPENING: begins mid-season on previous season's cane and early to mid-season on current season's cane FRUIT: short to medium length, narrow to medium width, small length to width ratio, broad conical shape in lateral view, light red, medium degree of glossiness, medium firmness, medium to strong adherence to plug



DRUPE: medium to large

FRUITING PERIOD: medium to long on previous and current season's canes

Origin and Breeding: 'DrisRaspEighteen' originated from a controlled cross conducted between 'DrisRaspTwelve' (female parent) and 'DrisRaspThirteen' (male parent) in Santa Cruz County, California, USA in April 2013. A single seedling of 'DrisRaspEighteen' was selected in October 2015 based on yield and fruit flavour. 'DrisRaspEighteen' was further propagated by root cuttings from 2015 to 2019 in Santa Cruz County, California, USA.

Tests and Trials: The comparative trial for 'DrisRaspEighteen' was conducted in Chilliwack, British Columbia during the 2022 growing season. Plants were transplanted in April 2021 into raised beds, covered with plastic mulch and irrigated with drip lines. The plots were arranged in a RCB design with four replicates. Each replicate consisted of 3 plants for a total of 12 plants of each variety. Plants were spaced approximately 90 centimetres apart within rows and 3 metres between rows. A total of 20 measurements were taken from each variety. Mean differences were significant at the 5% confidence probability level based on a paired Student's t-test.

Comparison table for 'DrisRaspEighteen'

	'DrisRaspEighteen'	'Maravilla'*	'DrisRaspSeven'
Terminal leaflet length (cm)			
mean	10.31	12.13	12.07
std. deviation	0.86	0.97	0.84
Terminal leaflet width (cm)			
mean	6.70	7.84	7.57
std. deviation	0.85	0.91	1.3



DrisRaspSeven (Esperanza) DrisRaspEighteen (RM0509.5) Maravilla
Raspberry: 'DrisRaspEighteen' (centre) with reference varieties 'DrisRaspSeven' (left) and 'Maravilla' (right)



DrisRaspSeven (Esperanza)

DrisRaspEighteen (RM0509.5)

Maravilla

Raspberry: 'DrisRaspEighteen' (centre) with reference varieties 'DrisRaspSeven' (left) and 'Maravilla' (right)

Proposed denomination: 'DrisRaspTwenty'

Application number: 21-10489

Application date: 2020/09/09 (priority claimed)

Applicant: Driscoll's, Inc., Watsonville, California, United States of America

Agent in Canada: Lavery, De Billy, S.E.N.C.R.L. - LLP, Montreal, Quebec

Breeder: Matthias D. Vitten, Driscoll's, Inc., Watsonville, California, United States of America

Kyle Rak, Driscoll's, Inc., Watsonville, California, United States of America

Luis Miguel Rodriguez Martinez, Driscoll's, Inc., Watsonville, California, United States of

America

James Heilig, Driscoll's, Inc., Watsonville, California, United States of America

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

Varieties used for comparison: 'Maravilla' and 'DrisRaspSeven' (Esperanza)

Summary: The dormant and current season's canes of 'DrisRaspTwenty' are longer than the dormant and current season's canes of both reference varieties. On the current season's cane, the density of spines on 'DrisRaspTwenty' is medium whereas it is sparse on 'Maravilla' and dense on 'DrisRaspSeven'. The predominant number of leaflets of 'DrisRaspTwenty' is five whereas as 'Maravilla' is three and 'DrisRaspSeven' is equally three and five. The terminal leaflet of 'DrisRaspTwenty' is smaller than that of both reference varieties.

Description:

PLANT: upright growth habit, very many current season's canes, bears fruit on previous season's cane in summer and on current season's cane in autumn, early vegetative bud burst

VERY YOUNG SHOOT: weak to medium intensity of anthocyanin colouration of apex during rapid growth, early to midseason emergence

CURRENT SEASON'S CANE: absent of very weak bloom, absent or very weak intensity of anthocyanin colouration, medium internode length, medium to long vegetative bud, spines present

DORMANT CANE: greyish brown

SPINES ON CURRENT SEASON'S CANE: medium density, very small to small base, short to medium length, brownish purple

FRUITING LATERAL ON PREVIOUS SEASON'S CANE: semi-erect

PEDICEL: medium number of spines

LEAF: medium to dark green colour on upper side, predominantly five leaflets, medium degree of rugosity, relative position

of lateral leaflets is free

LEAFLET: concave in cross-section

FLOWERING: begins early to mid-season on previous season's cane and early season on current season's cane

PEDUNCLE: very weak to weak intensity of anthocyanin colouration

FLOWER: small to medium sized

FRUIT RIPENING: begins mid-season on previous and current season's canes

FRUIT: long, medium width, medium length to width ratio, medium conical shape in lateral view, dark red, weak to medium degree of glossiness, soft to medium firmness, weak adherence to plug

DRUPE: large

FRUITING PERIOD: medium to long on previous season's cane and medium length of time on current season's cane

Origin and Breeding: 'DrisRaspTwenty' originated from a controlled cross conducted between 'DrisRaspTwelve' (female parent) and the proprietary line 'RG40.2' (male parent) in Santa Cruz County, California, USA in April 2009. A single seedling of 'DrisRaspTwenty' was selected in August 2011 based on yield and fruit size. 'DrisRaspTwenty' was further propagated by root cuttings from 2011 to 2020 in Santa Cruz County, California, USA.

Tests and Trials: The comparative trial for 'DrisRaspTwenty' was conducted in Chilliwack, British Columbia during the 2022 growing season. Plants were transplanted in April 2021 into raised beds, covered with plastic mulch and irrigated with drip lines. The plots were arranged in a RCB design with four replicates. Each replicate consisted of 3 plants for a total of 12 plants of each variety. Plants were spaced approximately 90 centimetres apart within rows and 3 metres between rows. A total of 20 measurements were taken from each variety. Mean differences were significant at the 5% confidence probability level based on a paired Student's t-test.

Comparison table for 'DrisRaspTwenty'

	'DrisRaspTwenty'	'Maravilla'*	'DrisRaspSeven'
Dormant cane length (cm)			
mean	242.19	208.15	173.48
std. deviation	18.28	27.19	15.00
Current season's cane length (cm)			
mean	238.00	205.49	185.80
std. deviation	16.09	31.83	10.27
Terminal leaflet length (cm)			
mean	10.24	12.13	12.07
std. deviation	0.64	0.97	0.84
Terminal leaflet width (cm)			
mean	6.04	7.84	7.57
std. deviation	0.28	0.91	1.30
reference varieties			



DrisRaspSeven (Esperanza) DrisRaspTwenty (RM0513.2) Maravilla
Raspberry: 'DrisRaspTwenty' (centre) with reference varieties 'DrisRaspSeven' (left) and 'Maravilla' (right)



(Esperanza)
Raspberry: 'DrisRaspTwenty' (centre) with reference varieties 'DrisRaspSeven' (left) and 'Maravilla' (right)

Proposed denomination: 'DrisRaspTwentyOne'

Trade name: Mya

Application number: 21-10490

Application date: 2020/09/09 (priority claimed)

Applicant: Driscoll's, Inc., Watsonville, California, United States of America

Agent in Canada: Lavery, De Billy, S.E.N.C.R.L. - LLP, Montreal, Quebec

Breeder: Matthias D. Vitten, Driscoll's, Inc., Watsonville, California, United States of America

Kyle Rak, Driscoll's, Inc., Watsonville, California, United States of America

Luis Miguel Rodriguez Martinez, Driscoll's, Inc., Watsonville, California, United States of

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James Heilig, Driscoll's, Inc., Watsonville, California, United States of America

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

Varieties used for comparison: 'Maravilla' and 'DrisRaspSeven' (Esperanza)

Summary: The current season's cane of 'DrisRaspTwentyOne' has weak to medium intensity of anthocyanin colouration whereas both reference varieties have an absent or very weak intensity of anthocyanin colouration. The current season's cane of 'DrisRaspTwentyOne' has purple spines whereas 'Maravilla' has brown spines and 'DrisRaspSeven' has purplish brown spines. The leaf of 'DrisRaspTwentyOne' has predominantly five leaflets whereas 'Maravilla' has three leaflets and 'DrisRaspSeven' has equally three and five leaflets. The pedicel of 'DrisRaspTwentyOne' has absent or very few spines whereas 'DrisRaspSeven' has a medium number of spines. The peduncle of 'DrisRaspTwentyOne' has a medium intensity of anthocyanin colouration whereas both reference varieties have a very weak intensity of anthocyanin colouration. The fruit of 'DrisRaspTwentyOne' is narrow to medium width whereas the fruit of both reference varieties is medium to broad.

Description:

PLANT: upright growth habit, medium to many current season's canes, bears fruit on previous season's cane in summer and on current season's cane in autumn, early vegetative bud burst

VERY YOUNG SHOOT: weak intensity of anthocyanin colouration of apex during rapid growth, early to mid-season emergence

CURRENT SEASON'S CANE: absent of very weak bloom, weak to medium intensity of anthocyanin colouration, medium to long internode length, medium length vegetative bud, spines present

DORMANT CANE: greyish brown

SPINES ON CURRENT SEASON'S CANE: sparse to medium dense, small base, short, purple

FRUITING LATERAL ON PREVIOUS SEASON'S CANE: semi-erect

PEDICEL: absent or very few number of spines

LEAF: medium to dark green colour on upper side, predominantly five leaflets, medium to strong rugosity, relative position of lateral leaflets is free

LEAFLET: concave in cross-section

FLOWERING: begins early to mid-season on previous season's cane and very early to early on current season's cane

PEDUNCLE: medium intensity of anthocyanin colouration

FLOWER: medium sized

FRUIT RIPENING: begins early to mid-season on previous and current season's canes

FRUIT: long, narrow to medium width, medium to large length to width ratio, medium conical shape in lateral view, dark red, medium degree of glossiness, firm to very firm, weak to medium adherence to plug

DRUPE: medium sized

FRUITING PERIOD: medium to long on previous and current season's canes

Origin and Breeding: 'DrisRaspTwentyOne' originated from a controlled cross conducted between 'DrisRaspTwelve' (female parent) and the proprietary line 'RC448.4' (male parent) in Santa Cruz County, California, USA in April 2014. A single seedling of 'DrisRaspTwentyOne' was selected in October 2016 based on fruit size and flavour. 'DrisRaspTwentyOne' was further propagated by root cuttings from 2016 to 2020 in Santa Cruz County, California, USA.

Tests and Trials: The comparative trial for 'DrisRaspTwentyOne' was conducted in Chilliwack, British Columbia during the 2022 growing season. Plants were transplanted in April 2021 into raised beds, covered with plastic mulch and irrigated with drip lines. The plots were arranged in a RCB design with four replicates. Each replicate consisted of 3 plants for a total of 12 plants of each variety. Plants were spaced approximately 90 centimetres apart within rows and 3 metres between rows. A total of 20 measurements were taken from each variety.



DrisRaspSeven (Esperanza)

DrisRaspTwentyOne (Mya)

Maravilla

Raspberry: 'DrisRaspTwentyOne' (centre) with reference varieties 'DrisRaspSeven' (left) and 'Maravilla' (right)



DrisRasp Seven (Esperanza)

DrisRaspTwentyOne (Mya)

Maravilla

Raspberry: 'DrisRaspTwentyOne' (centre) with reference varieties 'DrisRaspSeven' (left) and 'Maravilla' (right)

Proposed denomination: 'DrisRaspTwentyTwo'

Application number: 21-10491

Application date: 2020/09/09 (priority claimed)

Applicant: Driscoll's, Inc., Watsonville, California, United States of America

Agent in Canada: Lavery, De Billy, S.E.N.C.R.L. - LLP, Montreal, Quebec

Breeder: Matthias D. Vitten, Driscoll's, Inc., Watsonville, California, United States of America

Kyle Rak, Driscoll's, Inc., Watsonville, California, United States of America

Luis Miguel Rodriguez Martinez, Driscoll's, Inc., Watsonville, California, United States of

America

James Heilig, Driscoll's, Inc., Watsonville, California, United States of America

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

Varieties used for comparison: 'Maravilla' and 'DrisRaspSeven' (Esperanza)

Summary: On the current season's cane, the density of spines on 'DrisRaspTwentyTwo' is medium whereas it is sparse on 'Maravilla' and dense on 'DrisRaspSeven'. The current season's cane of 'DrisRaspTwentyTwo' has spines with a very small base whereas that of 'DrisRaspSeven' has spines with a medium sized base. The leaf of 'DrisRaspTwentyTwo' has a weak to medium degree of rugosity whereas the leaf of 'Maravilla' has strong rugosity. The terminal leaflet of 'DrisRaspTwentyTwo' is smaller than the terminal leaf of both reference varieties. The attitude of the fruiting lateral on the previous season's cane for 'DrisRaspTwentyTwo' is erect whereas that of both reference varieties is semi-erect.

Description:

PLANT: upright growth habit, very many current season's canes, bears fruit on previous season's cane in summer and on current season's cane in autumn, early to mid season vegetative bud burst

VERY YOUNG SHOOT: weak to medium intensity of anthocyanin colouration of apex during rapid growth, early to midseason emergence

CURRENT SEASON'S CANE: absent of very weak bloom, absent or very weak intensity of anthocyanin colouration, medium internode length, long vegetative bud, spines present

DORMANT CANE: brownish grey

SPINES ON CURRENT SEASON'S CANE: medium density, very small base, medium length, brownish green

FRUITING LATERAL ON PREVIOUS SEASON'S CANE: erect

PEDICEL: absent or very few spines

LEAF: light to medium green colour on upper side, predominantly five leaflets, weak to medium degree of rugosity, relative position of lateral leaflets is free

LEAFLET: concave in cross-section

FLOWERING: begins early to mid-season on previous season's cane and mid-season to late season on current season's cane

PEDUNCLE: no anthocyanin colouration

FLOWER: medium sized

FRUIT RIPENING: begins mid-season on previous season's cane mid-season to late season on current season's cane

FRUIT: medium length, medium to broad, small to medium length to width ratio, broad conical shape in lateral view, medium red, weak glossiness, medium to firm, weak to medium adherence to plug

DRUPE: medium size

FRUITING PERIOD: medium to long on previous season's cane and medium long on current season's canes

Origin and Breeding: 'DrisRaspTwentyTwo' originated from a controlled cross conducted between the proprietary line 'RJ0760.1' (female parent) and 'DrisRaspTwelve' (male parent) in Santa Cruz County, California, USA in April 2013. A single seedling of 'DrisRaspTwentyTwo' was selected in May 2016 based on yield and fruit size. 'DrisRaspTwentyTwo' was further propagated by root cuttings from 2016 to 2019 in Santa Cruz County, California, USA.

Tests and Trials: The comparative trial for 'DrisRaspTwentyTwo' was conducted in Chilliwack, British Columbia during the 2022 growing season. Plants were transplanted in April 2021 into raised beds, covered with plastic mulch and irrigated with drip lines. The plots were arranged in a RCB design with four replicates. Each replicate consisted of 3 plants for a total of 12 plants of each variety. Plants were spaced approximately 90 centimetres apart within rows and 3 metres between rows. A total of 20 measurements were taken from each variety. Mean differences were significant at the 5% confidence probability level based on a paired Student's t-test.

Comparison table for 'DrisRaspTwentyTwo'

	'DrisRaspTwentyTwo'	'Maravilla'*	'DrisRaspSeven'*
Terminal leaflet length (cm)			
mean	10.49	12.13	12.07
std. deviation	0.66	0.97	0.84
Terminal leaflet width (cm)			
mean	6.44	7.84	7.57
std. deviation	0.52	0.91	1.30
*reference varieties			



Raspberry: 'DrisRaspTwentyTwo' (centre) with reference varieties 'DrisRaspSeven' (left) and 'Maravilla' (right)



DrisRaspSeven DrisRaspTwentyTwo Maravilla
(Esperanza) (RM0582.4)
Raspberry: 'DrisRaspTwentyTwo' (centre) with reference varieties 'DrisRaspSeven' (left) and 'Maravilla' (right)