#### APPLICATIONS UNDER EXAMINATION

**APPLE** 

**APPLE** 

(Malus domestica)

Proposed denomination: 'ANABP 01'
Application number: 18-9481
Application date: 2018/05/11

Applicant: Western Australian Agriculture Authority, South Perth, Western Australia, Australia

**Agent in Canada:** Summerland Varieties Corp. (SVC), Summerland, British Columbia

Breeder: John Cripps, Department of Agriculture and Food, Western Australia, Stoneville, Western

Australia, Australia

Variety used for comparison: 'G198'

**Summary:** The shape of the fruit of 'ANABP 01' is globose whereas the fruit of 'G198' is conic to ellipsoid. The sepals of 'ANABP 01' are short whereas those of 'G198' are medium to long. The skin of the fruit of 'ANABP 01' has a medium degree of bloom and greasiness whereas the skin of 'G198' has an absent to weak bloom and greasiness. The flesh of 'ANABP 01' is white to greenish whereas the flesh of 'G198' is cream coloured. In transverse cross section, the apertures of the locules of the fruit of 'ANABP 01' is moderately open whereas that of 'G198' is fully open.

### **Description:**

TREE: medium vigour, ramified, spreading growth habit, fruit bearing on spurs and long shoots, begins flowering early to mid season, late fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: medium to thick, dark brown on side facing sun, dense pubescence on distal half, medium number of lenticels

PETIOLE: small extent of anthocyanin colouration from base

LEAF BLADE: outwards attitude in relation to shoot, small to medium length to width ratio, intensity of green on upper side ranging medium dark to very dark, bicrenate incisions of margin on distal half, absent or sparse pubescence on lower side

FLOWER: predominantly light pink at balloon stage, intermediate arrangement of petals, stigmas positioned at same level as anthers

YOUNG FRUIT: medium to large extent of anthocyanin over colour

FRUIT: medium sized, medium height to diameter ratio, globose shape, absent or weak degree of ribbing, absent or weak crowning at calyx end, short sepal

FRUIT SKIN: medium degree of bloom, medium degree of greasiness, yellow green ground colour, large relative area of over colour, medium to strong intensity of brown red over colour, over colour distributed as solid flush with weakly defined stripes, narrow stripes, small to medium sized area of russet around stalk attachment, absent or small area of russet on cheeks, absent or small area of russet around eye basin, medium to many lenticels, medium to large lenticels

FRUIT STALK: medium to thick

FRUIT STALK CAVITY: shallow, narrow

FRUIT EYE: small

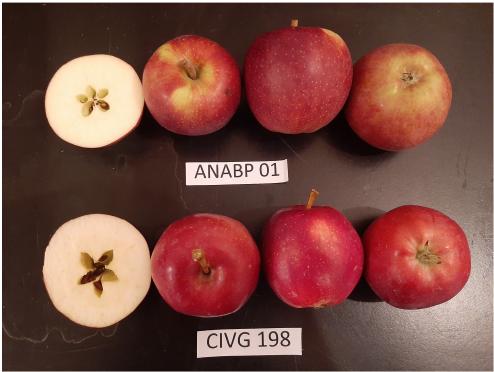
FRUIT EYE BASIN: medium to deep, medium width

FRUIT FLESH: medium firmness, white to greenish coloured, moderately open aperture of locules in transverse section

**Origin and Breeding:** 'ANABP 01' originated from a traditional cross conducted by the breeder John Cripps, at Stoneville Research Station in Western Australia in 1992. The cross was made between the varieties 'Cripps Red' and 'Royal Gala'. 'ANABP 01' was selected based on the fruit characteristics for colour, flavour, texture, size, shape and cropping behaviour. The first asexual propagation took place at the Manjimup Horticultural Research Institute in Manjimup, Western Australia in July of 1999.



**Tests and Trials:** The comparative trial for 'ANABP 01' was conducted from 2020 to 2021 at Summerland Varieties Corp. test plots, in Summerland, British Columbia. The trial consisted of 10 trees of 'ANABP 01' planted in 2018 on G935 rootstock and 5 trees of 'G198' planted in 2012 on M9-Nic29 rootstock. Trees were planted approximately 0.61 metres apart within a row and the rows were 3 metres apart. Observations and measurements were taken on 10 trees or 10 parts of trees for all varieties.



Apple: 'ANABP 01' (top) with reference variety 'G198' (bottom)

**Proposed denomination: 'LJ-1000' Application number:** 15-8679 **Application date:** 2015/06/30

Applicant: Regents of the University of Minnesota, Minnesota, United States of America

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

**Breeder:** Larry D. Jones, Jones, Larry, Quincy, Washington, United States of America

Variety used for comparison: 'Honeycrisp'

**Summary:** The area of over colour on the fruit of 'LJ-1000' is medium to large whereas the area of over colour of 'Honeycrisp' is small to medium sized. The over colour on the fruit of 'LJ-1000' is a solid flush with weakly defined stripes whereas the over colour on the fruit of 'Honeycrisp' is a weakly defined flush with strongly defined stripes. The fruit of 'LJ-1000' has many lenticels whereas the fruit of 'Honeycrisp' has a medium number of lenticels.

### **Description:**

TREE: weak vigour, ramified, spreading growth habit, fruit bearing on spurs and long shoots, begins flowering mid season, mid season to late fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: medium thickness, greenish brown on side facing sun, sparse to medium density pubescence on distal half, medium number of lenticels

PETIOLE: small extent of anthocyanin colouration from base

LEAF BLADE: upwards attitude in relation to shoot, small to medium length to width ratio, medium to dark intensity of green on upper side, biserrate incisions of margin on distal half, medium density of pubescence on lower side

FLOWER: predominantly light pink at balloon stage, free arrangement of petals, stigmas positioned above anthers

YOUNG FRUIT: very small to small extent of anthocyanin over colour

FRUIT: medium to large, medium height to diameter ratio, globose shape, absent or weak degree of ribbing, absent or weak crowning at calyx end, medium to long sepal

FRUIT SKIN: absent or weak degree of bloom, absent or weak degree of greasiness, green ground colour, medium to large relative area of over colour, medium intensity of red over colour, over colour distributed as solid flush with weakly defined stripes, narrow to medium width stripes, absent or small area of russet around stalk attachment, absent or small area of russet on cheeks, absent or small area of russet around eye basin, many medium sized lenticels

FRUIT STALK: medium thickness

FRUIT STALK CAVITY: medium to deep, medium width

FRUIT EYE: medium sized

FRUIT EYE BASIN: medium to deep, medium width

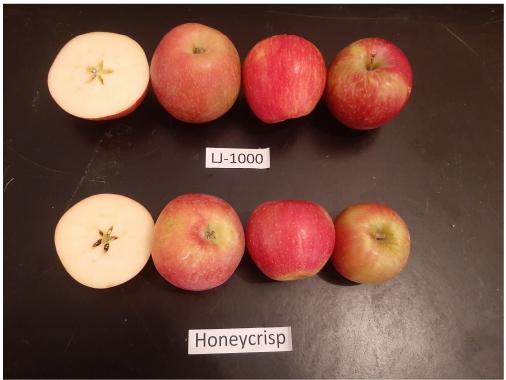
FRUIT FLESH: medium firmness, cream coloured, closed or slightly open aperture of locules in transverse section

**Origin and Breeding:** 'LJ-1000' originated as a spontaneous mutation of the variety 'Honeycrisp'. The new variety was discovered in a cultivated apple orchard owned by the breeder near Quincy, Washington, USA in 2003. In 2004 the mutant variety was grafted onto Sansa rootstock and in 2006 scion wood was removed from this tree and further grafted onto more Sansa rootstock within the same orchard. Further observations and comparisons were conducted on this second generation of trees and harvested fruit to ensure uniformity and stability with the first generation trees and the originally discovered tree.

**Tests and Trials:** The comparative trial for 'LJ-1000' was conducted from 2020 to 2021 at Summerland Varieties Corp. test plots, in Summerland, British Columbia. The trial consisted of 10 trees of 'LJ-1000' planted in 2016 on M26 rootstock and 10 trees of 'Honeycrisp' planted in 2012 on M9 rootstock. Trees were planted approximately 0.61 metres apart within a row and the rows were 3 metres apart. Observations and measurements were taken on 10 trees or 10 parts of trees for all varieties. Mean differences were significant at the 5% confidence probability level based on a paired Student's t-test.

# Comparison table for 'LJ-1000'

	'LJ-1000'	'Honeycrisp'*
Fruit height (cm)		
mean	7.92	6.31
std. deviation	0.50	0.34
Fruit diameter (cm)		
mean `´´	8.70	7.50
std. deviation	0.52	0.33
*reference variety	0.52	0.33



Apple: 'LJ-1000' (top) with reference variety 'Honeycrisp' (bottom)

**Proposed denomination:** 'MAIA1' Application number: 16-8792 Application date: 2016/01/22

Applicant: Midwest Apple Improvement Association, Newcomerstown, Ohio, United States of America

**Agent in Canada:** Summerland Varieties Corp. (SVC), Summerland, British Columbia

**Breeder:** Midwest Apple Improvement Association, Newcomerstown, Ohio, United States of America

Varieties used for comparison: 'Fuji' and 'Honeycrisp'

**Summary:** At the balloon stage, the flowers of 'MAIA1' are dark pink whereas the flowers of 'Fuji' are white and the flowers of 'Honeycrisp' are light pink. The extent of anthocyanin colouration on the young fruit of 'MAIA1' is small to medium sized whereas for 'Honeycrisp' it is absent or very small. The fruit of 'MAIA1' is smaller than that of 'Fuji' and has a larger diameter than that of 'Honeycrisp'. The over colour on the skin of the fruit of 'MAIA1' is a solid flush with weakly defined stripes whereas the over colour for 'Honeycrisp' is a weakly defined flush with strongly defined stripes. The fruit of 'MAIA1' has many lenticels whereas the fruit of 'Fuji' has a medium number of lenticels. The eye base for 'MAIA1' is medium to broad whereas that of 'Fuji' has a narrow to medium width. The flesh of 'MAIA1' is firm whereas that of both reference varieties is a medium firmness. The time of harvest and eating maturity for 'MAIA1' is late whereas it is midseason for 'Honeycrisp'.

# **Description:**

TREE: weak to medium vigour, ramified, spreading growth habit, fruit bearing on spurs and long shoots, begins flowering mid season to late, late fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: medium thickness, medium brown on side facing sun, medium to dense pubescence on distal half, many lenticels

PETIOLE: medium extent of anthocyanin colouration from base

LEAF BLADE: upwards attitude in relation to shoot, medium length to width ratio, medium intensity of green on upper side, serrate type 1 incisions of margin on distal half, medium density of pubescence on lower side

FLOWER: predominantly dark pink at balloon stage, overlapping arrangement of petals, stigmas positioned above anthers

YOUNG FRUIT: small to medium extent of anthocyanin over colour

FRUIT: medium sized, medium height to diameter ratio, globose shape, absent or weak degree of ribbing, absent or weak crowning at calyx end, medium to long sepal

FRUIT SKIN: medium degree of bloom, absent or weak degree of greasiness, yellow green ground colour, medium relative area of over colour, medium intensity of purple red over colour, over colour distributed as solid flush with weakly defined stripes, medium width stripes, absent or small area of russet around stalk attachment, absent or small area of russet on cheeks, absent or small area of russet around eye basin, many medium sized lenticels

FRUIT STALK: thin to medium thickness

FRUIT STALK CAVITY: medium depth, medium width

FRUIT EYE: medium to large

FRUIT EYE BASIN: medium depth, medium to broad

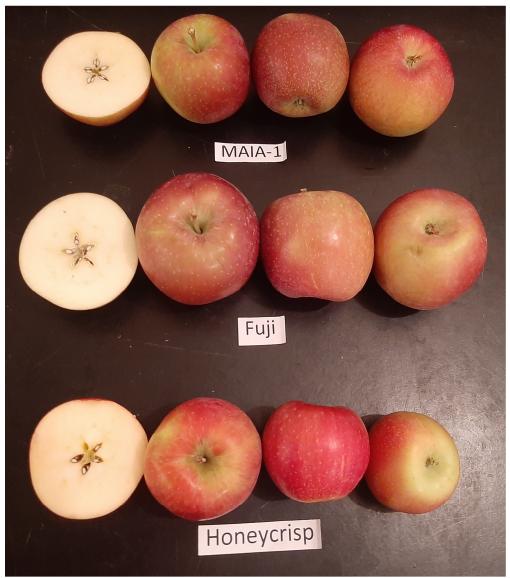
FRUIT FLESH: firm, greenish coloured, closed or slightly open aperture of locules in transverse section

**Origin and Breeding:** 'MAIA1' originated from a traditional cross conducted by the Midwest Apple Improvement Association apple breeding project at Lynd Fruit Farm in Patashka, Ohio, USA in the spring of 1998. The cross was made between the varieties 'Honeycrisp' and 'Fuji'. One year old seedlings were planted in David Doud's Countryline Orchard, Wabash, Indiana, USA in 2001. Evaluations began in 2005 and 'MAIA1' was selected based on the tree growth habit, harvest time, fruit quality characteristics and storability.

**Tests and Trials:** The comparative trial for 'MAIA1' was conducted from 2020 to 2021 at Summerland Varieties Corp. test plots, in Summerland, British Columbia. The trial consisted of 10 trees of 'MAIA1' planted in 2018 on MM111 rootstock, 10 trees of 'Fuji' planted in 2012 on M9-Nic29 rootstock and 10 trees of 'Honeycrisp' planted in 2012 on M9-Nic29 rootstock. Trees were planted approximately 0.61 metres apart within a row and the rows were 3 metres apart. Observations and measurements were taken on 10 trees or 10 parts of trees for all varieties. Mean differences were significant at the 5% confidence probability level based on a paired Student's t-test.

#### Comparison table for 'MAIA1'

	'MAIA1'	'Fuji'*	'Honeycrisp'*
Fruit height (cm)			
mean	6.94	8.21	6.31
std. deviation	0.51	0.59	0.34
Fruit diameter (cm)			
mean	8.18	8.72	7.50
std. deviation	0.47	0.46	0.33
*reference varieties			



Apple: 'MAIA1' (top) with reference varieties 'Fuji' (centre) and 'Honeycrisp' (bottom)

Proposed denomination: 'MINNB42'
Application number: 16-9001
Application date: 2016/08/31

Applicant: Regents of the University of Minnesota, Minnesota, United States of America

**Agent in Canada:** Summerland Varieties Corp. (SVC), Summerland, British Columbia

**Breeder:** James Luby, St. Paul, Minnesota, United States of America

David Bedford, Regents of the University of Minnesota, Minneapolis, Minnesota, United

States of America

Variety used for comparison: 'Honeycrisp'

**Summary:** The extent of anthocyanin colouration on the young fruit of 'MINNB42' is small whereas it is absent or very small on the young fruit of 'Honeycrisp'. The relative area of over colour on the fruit of 'MINNB42' is medium to large whereas the relative area for 'Honeycrisp' is small to medium sized. The intensity of the over colour on the fruit of 'MINNB42' is medium to strong whereas for 'Honeycrisp' it is of weak to medium intensity. The over colour on the fruit of 'MINNB42' is a solid flush with weakly defined stripes whereas the over colour for 'Honeycrisp' is a weakly defined flush with strongly defined stripes.

### **Description:**

TREE: weak vigour, ramified, spreading growth habit, fruit bearing on spurs and long shoots, begins flowering mid-season, mid-season to late fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: medium to thick, medium brown on side facing sun, sparse to medium density of pubescence on distal half, medium number of lenticels

PETIOLE: medium extent of anthocyanin colouration from base

LEAF BLADE: upwards attitude in relation to shoot, medium length to width ratio, strong intensity of green on upper side, biserrate incisions of margin on distal half, medium density of pubescence on lower side

FLOWER: predominantly light pink at balloon stage, intermediate arrangement of petals, stigmas positioned above anthers

YOUNG FRUIT: small extent of anthocyanin over colour

FRUIT: medium to large, medium height to diameter ratio, conic and globose shape, absent or weak degree of ribbing, absent or weak crowning at calyx end, medium length sepal

FRUIT SKIN: absent or weak degree of bloom, absent or weak degree of greasiness, yellow green ground colour, medium to large relative area of over colour, medium to strong intensity of red over colour, over colour distributed as solid flush with weakly defined stripes, narrow to medium width stripes, absent or small area of russet around stalk attachment, absent to small area of russet on cheeks, absent or small area of russet around eye basin, many medium to large lenticels

FRUIT STALK: medium thickness

FRUIT STALK CAVITY: medium depth, medium width

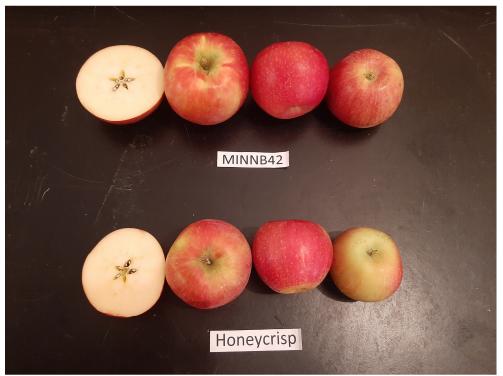
FRUIT EYE: small to medium sized

FRUIT EYE BASIN: medium depth, narrow

FRUIT FLESH: medium degree of firmness, cream coloured, closed or slightly open aperture of locules in transverse section

**Origin and Breeding:** 'MINNB42' originated as a naturally occurring branch mutation of the variety 'Honeycrisp'. The new variety was discovered by the breeders, David Bedford and James Luby, in Excelsior, Minnesota, USA in 1999. Selection of 'MINNB42' was based on the extent and intensity of the red over colour, resistance to disease, time of harvest maturity, fruit shape, number of lenticels, acidity and storage life.

**Tests and Trials:** The comparative trial for 'MINNB42' was conducted from 2020 to 2021 at Summerland Varieties Corp. test plots, in Summerland, British Columbia. The trial consisted of 10 trees of 'MINNB42' planted in 2017 on M9 rootstock and 10 trees of 'Honeycrisp' planted in 2012 on M9-Nic29 rootstock. An adjacent field of more than 20 trees of 'MINNB42' was also used for assessment. Trees were planted approximately 0.61 metres apart within a row and the rows were 3 metres apart. Observations and measurements were taken on 10 trees or 10 parts of trees for all varieties.



Apple: 'MINNB42' (top) with reference variety 'Honeycrisp' (bottom)

**Proposed denomination: 'Pinot Prince'** Application number: 21-10538 Application date: 2021/05/07

**Applicant:** Fruitbedrijf Thedingsweert B.V., Amsterdam, Netherlands

**Agent in Canada:** Smart & Biggar LLP, Ottawa, Ontario

**Breeder:** V.O.F. Gebr. van Beuningen, Kerk Avezaath, Netherlands

# **Description:**

TREE: medium to strong vigour, ramified, spreading growth habit, fruit bearing on spurs and long shoots, begins flowering mid to late season, late fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: medium to thick, short to medium length internode, dark brown on side facing sun, medium to dense pubescence on distal half, medium to many lenticels

PETIOLE: medium length, small to medium extent of anthocyanin colouration from base

LEAF BLADE: downwards attitude in relation to shoot, medium length and width, medium to large length to width ratio, light to medium intensity of green on upper side, crenate type incisions of margin on distal half, medium density of pubescence on lower side

FLOWER: predominantly purple at balloon stage, medium to large diameter when petals pressed into horizontal position, intermediate between free and overlapping arrangement of petals, stigmas positioned above anthers

YOUNG FRUIT: medium to large extent of anthocyanin over colour

FRUIT: medium to large, medium to tall, medium to large diameter, medium to large height to diameter ratio, conic shape, moderate degree of ribbing, absent or weak crowning at calyx end, medium to long sepal

FRUIT SKIN: absent or weak degree of bloom, moderate greasiness, whitish yellow ground colour, large relative area of over colour, medium to dark orange red over colour distributed as solid flush, medium area of russet around stalk attachment, absent or small area of russet on cheeks, absent or small area of russet around eye basin, medium to many small to medium sized lenticels

FRUIT STALK: medium to long, medium to thick

FRUIT STALK CAVITY: medium to deep, medium to broad

FRUIT EYE: small to medium sized

FRUIT EYE BASIN: medium depth, medium width

FRUIT FLESH: medium to firm, cream coloured, moderately open aperture of locules in transverse section

**Origin and Breeding:** 'Pinot Prince' (experimental designation h16/10/13/4) was discovered as a single branch mutation in a tree of the variety 'Pinova' in an orchard in Kerk Avezaath, the Netherlands, in 2013. Virus-free graft wood was used to produce new trees in 2014, with 4 further generations subsequently propagated. 'Pinot Prince' was selected on the basis of its fruit colouring, which starts earlier than 'Pinova' and is more solid flushed and less striped.

**Tests and Trials:** The detailed description of 'Pinot Prince' is based on the UPOV report of Technical Examination, reference number APF 757, purchased from The Community Plant Variety Office (CPVO), Angers, France. The trial was conducted by the Bundessortenamt, at the Prüfstelle Wurzen Testing Station in Germany, from 2019 to 2020.



Apple: 'Pinot Prince'



Apple: 'Pinot Prince'

**Proposed denomination: 'Plumac' Application number:** 16-8828 **Application date:** 2016/02/23

**Applicant:** Geoffrey and Marilyn Plunkett, Motueka, New Zealand

**Agent in Canada:** Summerland Varieties Corp. (SVC), Summerland, British Columbia **Breeder:** Geoffrey Plunkett, Geoffrey and Marilyn Plunkett, Motueka, New Zealand

Varieties used for comparison: 'Fuji', 'Braeburn' and 'Scifresh'

Summary: The growth habit for the trees of 'Plumac' is weeping whereas for 'Fuji' it is spreading, for 'Braeburn' it is upright and for 'Scifresh' it is spreading. The one-year-old shoots of 'Plumac' has many lenticels whereas those of 'Braeburn' have few and those of 'Scifresh' have a few to medium number. At the balloon stage, the predominant colour of the flowers for 'Plumac' are purple whereas those for 'Fuji' are white, those for 'Braeburn' are dark pink and those for 'Scifresh' are light pink. The extent of anthocyanin colouration on the young fruit of 'Plumac' is large whereas for 'Fuji' it is small to medium sized and for both 'Braeburn' and 'Scifresh' it is very small to small. The fruit of 'Plumac' is smaller than that of 'Fuji'. The shape of the fruit of 'Plumac' is globose whereas for 'Fuji' it is ellipsoid, for 'Braeburn' it is conic and for 'Scifresh' it is ovoid. The relative area of over colour on the fruit of 'Plumac' is medium sized whereas for 'Fuji' it is medium to large and for 'Scifresh' it is large. The over colour on the fruit of 'Plumac' is flushed, striped and mottled whereas for all the reference varieties it is a solid flush with weakly defined stripes. The fruit of 'Plumac' has few small lenticels whereas the fruit of 'Fuji' has a medium number of medium sized lenticels and the fruit of 'Braeburn' has many medium sized lenticels. Flowering for 'Plumac' begins late to very late whereas for 'Fuji' it is late to very late.

### **Description:**

TREE: medium vigour, ramified, weeping growth habit, fruit bearing on spurs and long shoots, begins flowering late to very late, mid-season to late fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: medium to thick, dark brown on side facing sun, medium density of pubescence on distal half, many lenticels

PETIOLE: medium extent of anthocyanin colouration from base

LEAF BLADE: upwards attitude in relation to shoot, medium length to width ratio, medium to strong intensity of green on upper side, serrate type 1 incisions of margin on distal half, medium density of pubescence on lower side

FLOWER: predominantly purple at balloon stage, free arrangement of petals, stigmas positioned above anthers

YOUNG FRUIT: large extent of anthocyanin over colour

FRUIT: medium to large, small to medium height to diameter ratio, globose shape, absent or weak degree of ribbing, absent or weak crowning at calyx end, short to medium length sepal

FRUIT SKIN: absent or weak degree of bloom, absent or weak degree of greasiness, yellow green ground colour, medium sized relative area of over colour, medium intensity of pink red over colour; over colour distributed as flushed, striped and mottled; narrow width stripes, medium sized area of russet around stalk attachment, absent or small area of russet around eye basin, few small lenticels

FRUIT STALK: thin to medium thickness

FRUIT STALK CAVITY: medium to deep, medium width

FRUIT EYE: large

FRUIT EYE BASIN: shallow to medium depth, medium width

FRUIT FLESH: soft to medium degree of firmness, cream coloured, closed or slightly open aperture of locules in transverse section

**Origin and Breeding:** 'Plumac' originated as a chance seedling discovered in 1998 by Geoffrey Lunkett in a garden in Upper Moutere, Nelson, New Zealand. Exact parentage is unknown, however it is suspected that it is likely resulting from the varieties 'Fuji' and 'Braeburn' due to proximity to the area of discovery. 'Plumac' was initially selected for fruit flavour. Further testing was conducted to assess the ease of growth, production characteristics, storability of the fruit, fruit firmness,

fruit flavour and texture. Asexual reproduction was first accomplished by budding onto M9 rootstock in Waikato, New Zealand in 2002.

**Tests and Trials:** The comparative trial for 'Plumac' was conducted from 2020 to 2021 at Summerland Varieties Corp. test plots, in Summerland, British Columbia. The trial consisted of 10 trees of 'Plumac' planted in 2019 on MM111 rootstock, 10 trees of 'Braeburn' planted in 2012 on M9 rootstock, 10 trees of 'Fuji' planted in 2012 on M9-Nic29 rootstock and 10 trees of 'Scifresh' planted in 2015 on M9-Nic29 rootstock. Trees were planted approximately 0.61 metres apart within a row and the rows were 3 metres apart. Observations and measurements were taken on 10 trees or 10 parts of trees for all varieties. Mean differences were significant at the 5% confidence probability level based on a paired Student's t-test.

Comparison table for 'Plumac'

	'Plumac'	'Fuji'*	'Braeburn'*	'Scifresh'*
Fruit height (cm)				
mean	6.93	8.21	7.28	7.00
std. deviation	0.54	0.59	0.66	0.47
Fruit diameter (cm)				
mean	7.51	8.72	7.99	7.16
std. deviation	0.29	0.47	0.62	0.30
*reference varieties	0.23	0.47	0.02	0.50



Apple: 'Plumac' (top) with reference varieties 'Fuji' (centre top), 'Braeburn' (centre bottom) and 'Scifresh' (bottom)

**Proposed denomination: 'Smeralda' Application number:** 16-9018 **Application date:** 2016/09/15

Applicant: C.I.V. Consorzio Italiano Vivaisti Societa Consortile A.R.L., Ferrara, Italy

Agent in Canada:
Bereskin & Parr, Toronto, Ontario
Michelangelo Leis, Ferrara, FE, Italy
Alessio Martinelli, Ferrara, FE, Italy
Francesco Tagliani, Argenta, FE, Italy
Gianfranco Castagnoli, Quingetole, MN, Italy

# **Description:**

TREE: medium vigour, ramified, spreading growth habit, fruit bearing on spurs and long shoots, begins flowering mid season, late fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: medium thickness, medium to long internode, medium brown on side facing sun, weak to medium pubescence on distal half, medium number of lenticels

PETIOLE: medium length, small extent of anthocyanin colouration from base

LEAF BLADE: outwards attitude in relation to shoot, medium to long, narrow, large length to width ratio, light to medium intensity of green on upper side, serrate type two incisions of margin on distal half, medium density of pubescence on lower side

FLOWER: predominantly dark pink at balloon stage, medium to large diameter when petals pressed into horizontal position, free arrangement of petals, stigmas positioned above anthers

YOUNG FRUIT: medium to large extent of anthocyanin over colour

FRUIT: medium sized, short to medium height, medium diameter, small to medium height to diameter ratio, conic and flattened shape, moderate degree of ribbing, absent or weak crowning at calyx end, medium length sepal

FRUIT SKIN: absent or weak degree of bloom, absent or weak greasiness, yellow green ground colour, small relative area of over colour, medium intensity of orange red over colour, over colour distributed as solid flush, absent or small area of russet around stalk attachment, absent or small area of russet on cheeks, absent or small area of russet around eye basin, medium number of medium sized lenticels

FRUIT STALK: medium length, thin to medium to thickness

FRUIT STALK CAVITY: deep, broad

FRUIT EYE: medium sized

FRUIT EYE BASIN: medium to deep, medium width

FRUIT FLESH: medium firmness, cream coloured, closed or slightly open aperture of locules in transverse section

**Origin and Breeding:** 'Smeralda' originated from a cross between the female parent designated 'DA-85' and the male parent designated 'B9-5' made in 1997 in Ferrara, Italy. The new variety was selected in September 2005 based on the fruit flavour, fruit aroma and resistance to certain diseases. Asexual reproduction by budding and grafting from 2005 to 2010 confirmed the variety reproduced true to type.

**Tests and Trials:** The detailed description of 'Smeralda' is based on the UPOV report of Technical Examination, reference number 2011/1880, purchased from The Community Plant Variety Office (CPVO), Angers, France. The trial was conducted by the Groupe d'Étude et de contrôle des Variétés Et des Semences (GEVES) at the Institut national de recherche pour l'agriculture, l'alimentation et l'environnement in Beaucouzé, France from 2012 to 2015.



Apple: 'Smeralda'



Apple: 'Smeralda'

**Proposed denomination: 'WA 2' Application number:** 16-9037 **Application date:** 2016/11/21

**Applicant:** Washington State University, Pullman, Washington, United States of America

**Agent in Canada:** Oyen Wiggs Green & Mutala LLP, Vancouver, British Columbia

**Breeder:** Bruce H. Barritt, Okanagan Centre, British Columbia

### **Description:**

TREE: medium vigour, ramified, spreading growth habit, fruit bearing on spurs and long shoots, begins flowering mid season, late to very late fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: medium to thick, medium to long internode, dark brown on side facing sun, weak to medium pubescence on distal half, medium to many lenticels

PETIOLE: medium length, large extent of anthocyanin colouration from base

LEAF BLADE: outwards attitude in relation to shoot, long, medium width, medium to large length to width ratio, medium to strong intensity of green on upper side, crenate incisions of margin on distal half, medium density of pubescence on lower side

FLOWER: predominantly dark pink at balloon stage, medium to large diameter when petals pressed into horizontal position, intermediate arrangement of petals, stigmas positioned at same level as anthers

YOUNG FRUIT: medium to large extent of anthocyanin over colour

FRUIT: medium to large, medium to tall, medium to large diameter, medium height to diameter ratio, conic shape, strong degree of ribbing, strong crowning at calyx end, medium length sepal

FRUIT SKIN: medium degree of bloom, absent or weak greasiness, yellow ground colour, large relative area of over colour, medium to strong intensity of red over colour, over colour distributed as solid flush, medium area of russet around stalk attachment, absent or small area of russet on cheeks, absent or small area of russet around eye basin, medium to many large lenticels

FRUIT STALK: medium to long, medium thickness

FRUIT STALK CAVITY: deep, broad

FRUIT EYE: large

FRUIT EYE BASIN: deep, broad

FRUIT FLESH: firm to very firm, cream coloured, closed or slightly open aperture of locules in transverse section

**Origin and Breeding:** WA 2' (breeders reference T19-17-3-9427) originated from a cross between 'Splendour' (female parent) and 'Gala' (male parent) made in 1994 in Wenatchee, Washington, USA. The germinated seedling was grown in a greenhouse and a bud from this seedling was grafted onto an M9 rootstock for evaluation in an orchard in the spring of 1997. The resulting fruit was evaluated in 2000 and 2001. Second generation trees were produced by chip-budding onto M9 rootstock in the fall of 2002 and the resulting trees were planted in three locations in Washington, USA. 'WA 2' was selected in 2004 on the basis of fruit appearance, fresh eating characteristics and storageability. Fruit from the second generation trees were compared to that of the originally budded tree starting in 2005, and each subsequent year thereafter, until 2008.

**Tests and Trials:** The detailed description of 'WA 2' is based on the UPOV report of Technical Examination, reference number 2014/1979, purchased from The Community Plant Variety Office (CPVO), Angers, France. The trial was conducted by the Groupe d'Étude et de contrôle des Variétés Et des Semences (GEVES) at the Institut national de recherche pour l'agriculture, l'alimentation et l'environnement in Beaucouzé, France from March 1, 2015 to December 1, 2017.



Apple: 'WA 2'



Apple: 'WA 2'



Apple: 'WA 2'

**APPLE** 

(Malus pumila)

**Proposed denomination:** 'MN55' Application number: 16-9056 Application date: 2016/12/13

**Applicant:** Regents of the University of Minnesota, Minnesota, United States of America

Agent in Canada: Summerland Varieties Corp. (SVC), Summerland, British Columbia

Breeder: James Luby, St. Paul, Minnesota, United States of America

Varieties used for comparison: 'Honeycrisp' and 'Minneiska'

**Summary:** The pubescence on the one-year-old shoots of 'MN55' is dense whereas that for 'Honeycrisp' is of medium density and that for 'Minneiska' is sparse. The one-year-old shoots of 'MN55' have many lenticels whereas those of 'Minneiska' have a few to medium number of lenticels. The fruit of 'MN55' is shorter than that of 'Minneiska'. The fruit of 'MN55' is ellipsoid to conic whereas that of both reference varieties is globose. The relative area of over colour on the fruit of 'MN55' is large whereas for 'Honeycrisp' it is small to medium sized and for 'Minneiska' it is medium sized. The intensity of the over colour for 'MN55' is strong whereas that for 'Honeycrisp' is weak to medium intensity and that for 'Minneiska' is of medium intensity. The fruit of 'MN55' has very few to few small lenticels whereas that of 'Honeycrisp' has medium to many medium sized lenticels and that of 'Minneiska' has many to very many large lenticels. The time of harvest and eating maturity for 'MN55' is early whereas for 'Honeycrisp' it is mid-season to late.

#### **Description:**

TREE: medium to strong vigour, ramified, spreading growth habit, fruit bearing on spurs and long shoots, begins flowering late, early fruit harvest and eating maturity

ONE-YEAR-OLD SHOOT: thin to medium thickness, reddish brown on side facing sun, dense pubescence on distal half, many lenticels

PETIOLE: very small to small extent of anthocyanin colouration from base

LEAF BLADE: outwards attitude in relation to shoot, medium to large length to width ratio, medium to strong intensity of green on upper side, serrate type 1 incisions of margin on distal half, medium density of pubescence on lower side

FLOWER: predominantly dark pink at balloon stage, overlapping arrangement of petals, stigmas positioned at same level as anthers

YOUNG FRUIT: absent or very small extent of anthocyanin over colour

FRUIT: medium sized, large height to diameter ratio, ellipsoid to conic shape, absent or weak degree of ribbing, absent or weak crowning at calyx end, medium length sepal

FRUIT SKIN: absent or weak degree of bloom, absent or weak degree of greasiness, yellow green ground colour, large relative area of over colour, strong intensity of brown red over colour, over colour distributed as solid flush with weakly defined stripes, narrow to medium width stripes, absent or small area of russet around stalk attachment, absent to small area of russet on cheeks, absent or small area of russet around eye basin, very few to few small lenticels

FRUIT STALK: thin to medium thickness

FRUIT STALK CAVITY: shallow to medium depth, narrow to medium width

FRUIT EYE: medium sized

FRUIT EYE BASIN: shallow, narrow

FRUIT FLESH: soft to medium degree of firmness, white coloured, moderately open aperture of locules in transverse section

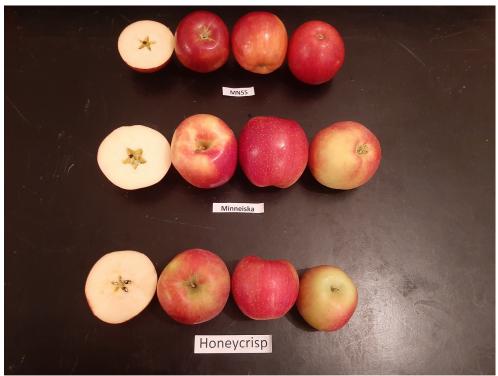
**Origin and Breeding:** 'MN55' originated from a cross conducted by the breeders, David Bedford and James Luby, in Excelsior, Minnesota, USA in 1997. The cross was made between the female parent variety 'Honeycrisp' and the male parent variety 'Monark' (also known as AA-44). 'MN55' was selected in 2003 based on time of harvest maturity, storage capability, fruit texture and flavour. Asexual reproduction of the new variety was first conducted by budding in 1998.

**Tests and Trials:** The comparative trial for 'MN55' was conducted from 2020 to 2021 at Summerland Varieties Corp. test plots, in Summerland, British Columbia. The trial consisted of 10 trees of 'MN55' planted in 2016 on MM111 rootstock, 10

trees of 'Honeycrisp' planted in 2012 on M9 rootstock and 10 trees of 'Minneiska' planted in 2008 on EMLA 26 rootstock. Trees were planted approximately 0.61 metres apart within a row and the rows were 3 metres apart. Observations and measurements were taken on 10 trees or 10 parts of trees for all varieties. Mean differences were significant at the 5% confidence probability level based on a paired Student's t-test.

Comparison table for 'MN55'

	'MN55'	'Honeycrisp'*	'Minneiska''
Fruit height (cm)			
mean	6.99	6.31	7.75
std. deviation	0.45	0.34	0.52



Apple: 'MN55' (top) with reference varieties 'Minneiska' (centre) and 'Honeycrisp' (bottom)