

mature stock plants were generated from a virus indexed plant from the evaluated clone and also through tissue culture and were found to be uniform and stable. 'Maroochy Jewel' will be commercially propagated by runners and sometimes following tissue culture from virus indexed stock plants. Breeder: M. E. Herrington, S. Prytz, and J. A. Moisaner, Queensland Horticulture Institute, Department of Primary Industries, Nambour and Cleveland, QLD, Australia.

Choice of Comparators Most of the strawberry varieties of common knowledge at the time of the application were excluded on the basis of their high chill requirement, upright plant habit, truss type, fruit shape or susceptibility to fruit cracking due to rain. 'Maroochy Starfire', the most similar variety of common knowledge, and the parents 'Kabarla' and 'Chandler' were included in the comparative trial.

Comparative Trial Comparators: 'Maroochy Starfire', 'Kabarla', 'Chandler'. Location: Maroochy Research Station, Nambour, QLD (latitude 26°37' South, longitude 152°57' East, elevation 29m), Mar-Apr to Sep 1999. Conditions: trial conducted in a fumigated field, runners from commercial sources (comparators) or field station in QLD runner growing district (Stanthorpe), reflective polythene mulch, double rows on beds (40cm inter-row, 35cm intra-row and 140cm between bed centres), trickle irrigated and fertilised, pest and disease treatments applied as required. Trial design: randomised complete block design with 4 blocks and 12 plants per plot, significance tested using Duncan's Multiple Range. Measurements: from twenty plants or fruit as five individual plants or harvested fruit sampled per cultivar per block.

Prior Applications and Sales

No prior applications. First Australian sale May 1999. First overseas sale nil.

Description: M. E. Herrington and S. Prytz, Maroochy Research Station, Nambour and J. Moisaner, Redlands Research Station, Cleveland, QLD.

'Maroochy Starfire'

Application No: 97/255 Accepted: 7 Oct 1997.

Applicant: **The State of Queensland through its Department of Primary Industries, Brisbane, QLD.**

Characteristics (Table 41, Figure 34) Plant: habit flat-globose, density medium, vigour medium-strong, early maturing. Leaf: colour upper-side medium green (RHS 147A, 1995), shape in transverse cross-section strongly to slightly concave, blistering absent or very weak, glossiness weak. Terminal Leaflet: longer than broad (average ratio 1.07), shape of base obtuse, shape of incisions on margin crenate. Petiole: attitude of hairs strongly outwards. Stipules: anthocyanin absent or very weak. Stolons: number many. Inflorescence: position relative to foliage beneath. Primary Flower: diameter medium (average 34mm) size of calyx relative to corolla same size. Petal: relative position of petals overlapping, length/width ratio as long as broad. Fruit: ratio of length to width much longer than broad, size medium (average 15g), predominant shape bi-conical or conical to wedged, band without achenes medium, unevenness of surface absent to very weak, external colour dark red (RHS 46A, 1995) and slightly uneven, glossiness strong, insertion of achenes below surface, insertion of

calyx above fruit, attitude of calyx segments reflexed to spreading, size of calyx in relation to fruit diameter same size to slightly larger, adherence of calyx to fruit medium strong, firmness firm, colour of flesh dark red (RHS 44A, 1995), hollow centre absent or very weakly expressed, distribution of red colour of flesh marginal and central. Time of flowering and ripening early. Type of bearing partially remontant.

Origin and Breeding Controlled pollination: seed parent 'Chandler' x pollen parent 'Kabarla'. The seed parent was characterised by terminal leaflets as long as broad, late flowering and soft fruit. The pollen parent was characterised by leaf cross section flat to slightly concave, terminal leaflets much longer than broad and fruit slightly longer than broad. Hybridisation took place in Cleveland, QLD, Australia in 1992. From this cross, seedling number 93-486 was chosen from among 5000 seedlings at Redlands Research Station, Cleveland in 1993 using the following characteristics and advanced through plot selection trials at Nambour in 1994, 1995, 96, and 97. Selection criteria: yield, yield distribution, earliness, fruit size, external and internal colour, resistance to bruising and abrasion, shelf-life, flavour, attractiveness of fruit, tolerance to disease, ease of harvest, truss type, runner production. Propagation: by runners since first selection. A number mature stock plants were generated from a virus indexed plant from the evaluated clone and also through tissue culture and were found to be uniform and stable. 'Maroochy Starfire' will be commercially propagated by runners and sometimes following tissue culture from virus indexed stock plants. Breeder: M. E. Herrington, S. Prytz, and J. A. Moisaner, Queensland Horticulture Institute, Department of Primary Industries, Nambour and Cleveland, QLD, Australia.

Choice of Comparators Most of the strawberry varieties of common knowledge at the time of the application were excluded on the basis of their high chill requirement, upright plant habit, truss type or susceptibility to fruit cracking due to rain. The seed parent 'Chandler' and the pollen parent 'Kabarla' were included in the comparative trial as the most similar varieties of common knowledge. Other more remote potential comparators included 'Sweet Charlie' and 'Mindarie' but both of these were excluded because they are susceptible to fruit cracking due to rain.

Comparative Trial Comparators: 'Chandler', 'Kabarla'. Location: Maroochy Research Station, Nambour, QLD (latitude 26°37' South, longitude 152°57' East, elevation 29m), Mar-Apr to Sep 1999. Conditions: trial conducted in a fumigated field, runners from commercial sources (comparators) or field station in QLD runner growing district (Stanthorpe), reflective polythene mulch, double rows on beds (40cm inter-row, 35cm intra-row and 140cm between bed centres), trickle irrigated and fertilised, pest and disease treatments applied as required. Trial design: randomised complete block design with 4 blocks and 12 plants per plot, significance tested using Duncan's Multiple Range. Measurements: from twenty plants or fruit as five individual plants or harvested fruit sampled per cultivar per block.

Prior Applications and Sales

No prior applications. First Australian sale May 1999. First overseas sale nil.

Description: **M. E. Herrington and S. Prytz, Maroochy Research Station, Nambour and J. Moisander, Redlands Research Station, Cleveland, QLD.**

'Maroochy Sundew'

Application No: 99/026 Accepted: 28 Jan 1999.

Applicant: **The State of Queensland through its Department of Primary Industries, Brisbane, QLD.**

Characteristics (Table 41, Figure 34) Plant: habit flat globose, density dense, vigour strong, mid maturing. Leaf: colour upper-side medium green (RHS 146A, 1995), shape in transverse cross-section slightly concave, blistering absent or very weak, glossiness weak. Terminal Leaflet: longer than broad (average ratio 1.06), shape of base obtuse, shape of incisions on margin crenate. Petiole: attitude of hairs strongly outwards. Stipules: anthocyanin absent or very weak. Stolons: numbers many. Inflorescence: position relative to foliage beneath. Primary Flower: diameter medium (average 33 mm) size of calyx relative to corolla smaller. Petal: relative position of petals overlapping, length/width ratio slightly to much broader than long. Fruit: ratio of length to width much longer than broad, size medium (average 19g), predominant shape bi-conical to wedged and some conical, band without achenes medium, unevenness of surface absent to very weak, external colour red (RHS 45A, 1995) and slightly uneven, glossiness medium, insertion of achenes below surface, insertion of calyx above fruit, attitude of calyx segments spreading, size of calyx in relation to fruit diameter same size, adherence of calyx to fruit very strong, firmness firm, colour of flesh medium red (RHS 44A, 1995), hollow centre absent or very weakly expressed, distribution of red colour of flesh marginal and central. Time of flowering and ripening medium. Type of bearing partially remontan.

Origin and Breeding Controlled pollination: seed parent 'Kabarla' x pollen parent 'Chandler'. The seed parent was characterised by terminal leaflet much longer than broad, medium flower size (28 mm) and fruit slightly longer than broad. The pollen parent was characterised by terminal leaflet as long as broad and soft fruit. Hybridisation took place in Cleveland, QLD, Australia in 1993. From this cross, seedling number 94-059 was chosen from among 5000 seedlings at Maroochy Research Station, Nambour in 1994 using the following characteristics and advanced through plot selection trials in 1995, 96, and 97. Selection criteria: yield, yield distribution, earliness, fruit size, external and internal colour, resistance to bruising and abrasion, shelf-life, flavour, attractiveness of fruit, tolerance to disease, ease of harvest, truss type, runner production. Propagation: by runners since first selection. A number of mature stock plants were generated from a virus indexed plant from the evaluated clone and also through tissue culture and were found to be uniform and stable. 'Maroochy Sundew' will be commercially propagated by runners and sometimes following tissue culture from virus indexed stock plants. Breeder: M. E. Herrington, S. Prytz, and J. A. Moisander, Queensland Horticulture Institute, Department of Primary Industries, Nambour and Cleveland, QLD, Australia.

Choice of Comparators. Most of the strawberry varieties of common knowledge at the time of the application were

excluded on the basis of their high chill requirement, upright or flat plant habit, truss type, fruit shape or susceptibility to fruit cracking due to rain. 'Maroochy Starfire', the most similar variety of common knowledge, and the parents 'Kabarla' and 'Chandler' were included in the comparative trial.

Comparative Trial Comparators: 'Maroochy Starfire', 'Kabarla', 'Chandler'. Location: Maroochy Research Station, Nambour, QLD (latitude 26°37' South, longitude 152°57' East, elevation 29m), Mar-Apr to Sep 1999. Conditions: trial conducted in a fumigated field, runners from commercial sources (comparators) or field station in QLD runner growing district (Stanthorpe), reflective polythene mulch, double rows on beds (40cm inter-row, 35 cm intra-row and 140cm between bed centres), trickle irrigated and fertilised, pest and disease treatments applied as required. Trial design: randomised complete block design with 4 blocks and 12 plants per plot, significance tested using Duncan's Multiple Range. Measurements: from twenty plants or fruit as five individual plants or harvested fruit sampled per cultivar per block.

Prior Applications and Sales

No prior applications. First Australian sale May 1999. First overseas sale nil.

Description: **M. E. Herrington and S. Prytz, Maroochy Research Station, Nambour and J. Moisander, Redlands Research Station, Cleveland, QLD.**

'Sweet Charlie'

Application No: 95/294 Accepted: 18 Dec 1995.

Applicant: **Florida Foundation Seed Producers Inc, Greenwood, Florida, USA.**

Agent: **The State of Queensland through its Department of Primary Industries, Brisbane, QLD.**

Characteristics (Table 41, Figure 35) Plant: habit globose, density open to medium, vigour weak to medium. Leaf: colour upper-side dark green (RHS 147A, 1995), shape in transverse cross-section strongly concave, blistering absent or very weak, glossiness medium weak. Terminal Leaflet: longer than broad (average ratio 1.06), shape of base obtuse, shape of incisions on margin crenate. Petiole: attitude of hairs strongly outwards. Stipules: anthocyanin absent or very weak. Stolons: number many. Inflorescence: position relative to foliage level with to slightly beneath. Primary Flower: diameter medium (average 32 mm), size of calyx relative to corolla same size. Petal: relative position of petals overlapping, length/width ratio slightly broader than long. Fruit: ratio of length to width slightly longer than broad, size medium (average 18g), predominant shape conical, band without achenes narrow, unevenness of surface absent to very weak, external colour red (RHS 45A, 1995) and slightly uneven, glossiness strong, insertion of achenes level with surface, insertion of calyx above fruit, attitude of calyx segments spreading, size of calyx in relation to fruit diameter slightly larger, adherence of calyx to fruit weak, firmness medium firm, colour of flesh medium red (RHS 43A, 1995), hollow centre weakly expressed, distribution of red colour of flesh marginal and central. Time of flowering and ripening early. Type of bearing partially remontan.