

Research of Birch Cultivars

by Paul Bartlett, Stone Lane Gardens, Chagford, Devon.

paul.bartlett@stonelanegardens.com

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Introduction

Early in 2011 I was asked by Martyn Rix to create a written record of all the Birch cultivars, so that this information could be included in the *Betula* monograph by Kenneth Ashburner and Hugh McAllister – “The Genus *Betula*”. This book was published in 2013.

This list is the result of my efforts so far and is regularly updated as I uncover more facts about the cultivars. Where possible, I have included information about their origin. This would not have been possible without the help of many knowledgeable plantsmen. I am very grateful for their support and in fact this has really been a joint effort with me acting as a gatherer of information. This list is not exhaustive and no doubt I have failed (despite the wonders of the internet) to identify all the world's cultivars, but I hope that the information I have amassed will be of use to both the general public and those within the trade. If you know of other cultivars or can add to the information gathered, then please get in touch so that I can update the list.

Betula chinensis

'Rhinegold'

Named by Robert Vernon of Bluebell nursery. Grown from seed given by Tim Whiteley. Superb golden bark. Robert's parent stock plant has since died.

Betula cordifolia

'Clarenville'

From a tree at Stone Lane Gardens, Devon. Collected and named by Kenneth Ashburner from Clarenville, Newfoundland, Canada. Pink-brown bark roughly peeling. Good autumn colour.

Betula costata

This species was often confused with *Betula ermanii* in the past. All the known *Betula costata* cultivars have now been proven to be *Betula ermanii* and there are no cultivars of true *Betula costata* that we know of.

Betula dahurica

'Maurice Foster'

Selected by Maurice Foster from a tree at Stone Lane Gardens, Devon. Named by Kenneth Ashburner. Seed collected from a forest plot of wild Hokkaido provenances in Yamabe, Furano, Hokkaido, Japan.

It's quite vigorous and very shaggy barked, with less susceptibility to late frosts than most continental provenances. Bark ultimately pale but red when young, with a showy red-brown colour to the inner surface of the bark flakes typical of hexaploid populations (Hokkaido, Honshu and Iturup).

'Stone Farm'

Taken from a tree at Stone Lane Gardens, Devon. From the same group of seedlings as 'Maurice Foster'. Named by Kevin Croucher of Thornhayes Nursery in 1997.

The very dark bark ex-foliates in curly cinnamon like flakes to reveal a pinky layer beneath.

Betula ermanii

'Blush'

Named by Piet de Jong. The standard *Betula ermanii* of the Dutch trade which had long been wrongly named as *Betula costata*. So similar to 'Grayswood Hill' that many people think it is the same tree. Origin unknown. A graceful large birch with creamy white bark with horizontal lenticels. Rich yellow leaves in autumn.

'Fincham Cream'

from the late Maurice Mason's arboretum at Talbot Manor, Fincham. Originally sold as *Betula costata* but now recognised as being *Betula ermanii*. A batch of seedlings were grown at Bentry / Hillier arboretum and five of these trees were sent by Harold Hillier to Maurice Mason as *Betula costata*. The best one was selected by Brian Humphrey and called 'Fincham Cream'. Very attractive pale cream smooth bark and superb gold autumn colour.

'Grayswood Hill'

From Grayswood Hill, Haslemere, Surrey. Home of the Pilkington family (of glass manufacturing fame). Origin unknown.

Good, creamy orange bark with attractive lenticels. Strong grower. Reliably rich golden autumn leaf colour.

'Hakkoda Orange'

From a tree at Stone Lane Gardens, Devon grown from seed collected by Kenneth Ashburner from Mt Hakkoda, Japan. A beautiful form with orange/brown bark and reliably rich golden autumn leaf colour.

'Holland'

New name for a plant grown in the Netherlands as *Betula ermanii*, though it may be a hybrid.

'Kwanak Weeping'

This originated in Ness Garden, Wirral as a spreading shrub from Kwanak Botanic Garden, Korea in the 1970s. Initially given the cultivar name of 'Pendula' but changed to comply with nomenclature rules.

Propagated by Maurice Foster as a standard to create a beautiful small weeping tree with a gently spreading crown of cascading twigs, ideal for a small garden specimen. Cream coloured peeling bark, strong yellow autumn tints.

'Mt Apoi' – see Hybrids at end

'Mt. Zao Purple'

From a tree at Stone Lane Gardens, Devon grown from seed collected by Kenneth Ashburner from Mt. Zao, North Honshu, Japan. The names 'Mt Zao' and 'Zao Purple' were created about the same time, so it is difficult to decide which is correct. We are going to call it 'Mt Zao Purple' in future, in the hope that this will tie the two names together. 'Zoo purple' is simply a mis-spelling that has been perpetuated.

The bark has a base colour of purple overlain with creamy orange, combined with very prominent horizontal bands of lenticels, creating an almost striped appearance. Reliably rich golden autumn leaf colour.

'**Pendula**' – see 'Kwanak Weeping'

'**Polar Bear**'

Whilst most people in the nursery trade think of this as *Betula ermanii*, there are some who think it could be *Betula utilis*. The two species are very distinct, so if there is any doubt, then it would suggest that the cultivar is in fact a hybrid. While I am leaving it among the *ermanii* for the moment, more research needs to be done.

A strong grower with a pure white heavy trunk and branch structure. Stunning in winter. Reliably rich golden autumn leaf colour.

Thought to be a hybrid because:- teeth on leaf margins blunter than *ermanii*; fruit is pendant; scales of fruit – side lobes not spreading, central lobe too short; wings of seed too big – usually larger than nut.

'**Saitoana**' – see *Betula Ermanii* var. *saitoana*

'Zao purple' – see 'Mt Zao Purple'

'Zoo purple' - see 'Mt Zao Purple'

Betula ermanii* var. *Saitoana

Collected in Korea by Mark Fillan. Sometimes called the cultivar name 'Saitoana' but more correctly called *Betula ermanii* var. *saitoana* (coll. no. MSF 865). This is obviously not a true cultivar, but is sometimes incorrectly treated as such by the nursery trade.

A true dwarf genotype that will make a bushy, white-stemmed little tree. As a variety, it is slow growing and after 20 years varies from a nondescript twiggy 2.5m shrub to a small single stemmed tree to 3.5m with a typical cream *Betula ermanii* stem, rather like a miniature version of the species.

Betula medwediewii

Note:

At Westonbirt there are a couple of *Betula medwediewii* that were planted in 1938 by Mr Mitchell.

The Westonbirt notes show that these trees are grafted, presumably on *Betula pendula* rootstocks.

The Westonbirt trees are now quite large (huge compared with other *Betula medwediewii* I have seen). So it seems that the *Betula pendula* rootstock is having an effect on their growth (not surprising) and making them much larger trees than their seed-grown counterparts. For this reason, grafted *Betula medwediewii* being sold by nurseries should not be described as small shrubs, as this is mis-leading to the public. Only plants grown from seed or cuttings are going to retain the characteristic of small growth.

'**Gold Bark**'

A selection from Alphons van der Bom Nursery, Netherlands, about 1965; origin unknown.

Supposed to be more tree-like, but all the photos I have seen appear almost identical to normal seed-grown *medwediewii*.

Silvery-brown metallic stems with a slight golden cast. Multi-stemmed shrub.

'Winkworth Form'

A selection by Kevin Croucher of Thornhayes nursery, Devon from trees in Stone Lane Gardens, Devon, acquired from Winkworth arboretum. Origin unknown. A form with a slightly paler bark, though not very different from seed-grown trees.

Betula nana

'Glengarry'

A Scottish selection. Origin unknown.

Betula nigra

A word of warning about *Betula nigra* cultivars. *Betula nigra* is one of the most heat tolerant birches, coming as it does from areas with hot summers. Many of the cultivars below state that they have a dwarf or compact shrubby nature. However, it has been observed that in more temperate climates, these cultivars will grow larger.

'Black Star'

Betula nigra Black Star is in my view a very good cultivar, available as early-to-peel own-root plants from Minier Nurseries - and prior to that I assume the USA. Our nursery borehole water is unfortunately high pH and consequently we struggle with chlorosis on *Betula nigra* Summer Cascade (despite starting off with low pH growing medium). However we find no such issues with *Betula nigra* Black Star - so assuming that this is not the result of hybridisation, this may point to some level of high pH tolerance. – Bob Askew
Possibly introduced by the Minier nursery in France in 2006. good display of shaggy pinkish-orange bark and a neat growth habit.

'Cinnamon Bark'

Introduced by Forrest Keeling Nursery, Elsberry, Missouri, USA.
Lighter-coloured exfoliating bark than native.

'City slicker'®

Raised by Carl Whitcomb of Stillwater, Oklahoma, USA.
Dark leaved and a whiter than usual trunk.

Dura-Heat = 'BNMTF'

Raised by Moon Nursery, Loganville, Georgia, USA.

A more heat and drought tolerant form of this species. Densely pyramidal habit with glossy green leaves that fade to clear butter yellow in fall. Winter bark is pinkish-orange with prominent exfoliation. Bark exfoliates early.

Fox Valley® = 'Little King'

Discovered by Jim King, Oswego, Illinois. There is a mature specimen at RHS Wisley.

This cultivar features orange to brownish bark which ex-foliates at an early age to reveal a somewhat lighter shaded brownish inner bark. Compact growing with many branches, almost shrub like.

'Graceful Arms'

Found in Wisconsin by Darrell Kromm and Tom Dilatush.

Another weeper, more open and larger leaved than Summer Cascade, and later to exfoliate bark.

Heritage = 'Cully'

From a tree in St Louis, Missouri, USA. Origin of parent tree unknown. Cultivated by Earl Cully in 1979.

A paler form with vivid gold autumn colour and creamy shaggy bark. Selected for its notable resistance to birch borer and leaf spot. It has been noted that this cultivar does not do well in the colder east side of the UK and certainly many *Betula nigra* provenances struggle with the late frosts of the UK.

Northern Tribute® = '**Dickinson**'

Introduced by North Dakota State University. In 1989, a seed-propagated tree growing in Dickinson, North Dakota was tissue-culture propagated. This 40-year old tree was planted in 1966 and is the largest tree of this species observed in the upper Northern Plains. It has performed very well under rather compacted, dry and alkaline soil conditions in USDA zone 3. Many seed sources of River Birch suffer winter injury in zone 3 and also may die from iron chlorosis in alkaline pH soils. The bark on this cultivar is ivory colored with striking coppery-bronze exfoliating bark which contrasts to add landscape interest. As trees reach 20 to 25 years of age, the shaggy bark becomes more uniformly tannish-brown. Foliage quality has been good with yellow autumn colour.

'**Peter Collinson**'

This selection was collected in Canada by French plantsman Aurélien Hemono and is propagated by Junkers nursery, Somerset. Named in honour of the man responsible for introducing *Betula nigra* to the nursery trade. *Betula nigra* is not native to Canada, so although the parent tree was found in a plantation in Quebec, the trees must have been imported seedlings from the USA. Darker young bark and more compact than 'Heritage'.

'**Shiloh Splash**'

An introduction by Shiloh Nursery, Harmony, North Carolina, USA.

Variegated, shrubby form, white margined green leaves, flushed pink when young, very attractive but reverts to green quite easily.

'**Summer Cascade**'

A weeping form picked in 1996 from a batch of seedlings planted in 1992 in Shiloh Nursery, Harmony, North Carolina, USA. Origin of seedlings unknown.

'**Suwanee**'

Introduced by R.L. Byrnes, Trail Ridge nursery, Keystone Heights, Jacksonville, Florida, USA in 1985.

With larger and shinier leaves than is typical for the species, and with salmon-white exfoliating bark.

Tecumseh Compact = '**Studetec**'

Introduced by Studebaker Nurseries in New Carlisle, Ohio, USA.

A compact form with graceful, pendulous branches and a low yet wide and spreading habit. The leaves are oval, glossy green and the bark tends to be pink when young before turning brown and ridged on older trees.

'**Wakehurst**'

From a vigorous seedling (now dead) at Wakehurst showing good bark qualities (Acc. no. 1983 8312). Named by Tony Schilling in 1990. Seed was from Kenneth Ashburner, in which case it would have been sent from a US seed firm, so the provenance will never be known. Propagated by Chris Lane. A good form with more pink in the bark than most and showing early bark colour, although the coloured bark fades as it matures.

Betula papyrifera

'Belle Vue'

From a tree at Stone Lane Gardens, Devon. Collected and named by Kenneth Ashburner from Belle Vue, Newfoundland, Canada.

Red-brown slightly rough peeling bark. Autumn leaf colour is a rich yellow persisting on the trees for longer than most *papyrifera*.

'Chickadee'

From a tree collected 25 miles northwest of Whitecourt, Alberta, Canada. Propagated by Beaverlodge nursery. The parent tree is at the University of Guelph arboretum, Guelph, Ontario, Canada. This form is slow-growing with a dense, pyramidal habit. Possibly a hybrid between *Betula papyrifera* and *Betula pendula ssp. mandshurica*.

'Grandis'

Named by H.J. Grootendorst. Not used much outside the Netherlands.

Large tree with large, heart-shaped leaves; leaves deeply and doubly serrate.

'Peter Mills'

Originated from seedlings from the Hemlock Valley ski resort near Mission to the east.

'Prairie Dream'

Selected at North Dakota State University, USA.

It has dark green leaves, golden yellow in autumn and snow white bark.

'Renci'

From a tree growing in a trial plot at Wooster, Ohio in 1986. It is an open-pollinated cross of two *Betula papyrifera*, origin unknown. Selected by Thomas Pinney of Sturgeon Bay, Wisconsin, USA and propagated by the Evergreen Nursery company of the same location.

A white barked form that is said to have good birch borer resistance.

'Saint George'

From a tree at Stone Lane Gardens, Devon. Collected by Kenneth Ashburner from St Johns, Newfoundland, Canada. Selected by Kevin Croucher of Thornhayes nursery, Devon. It is red barked, peeling to white when young, ultimately white, though sometimes with a hint of pale pink. Excellent form with good persistent golden yellow leaves in autumn.

'Snowy'

From a tree at Michigan state University, USA. White Barked.

'Vancouver'

From a tree at Stone Lane Gardens, Devon, collected by Kenneth Ashburner from Abbotsford, Vancouver, Canada. Selected by Kevin Croucher of Thornhayes nursery, Devon.

It is very vigorous, has rich red brown stems and rich gold autumn colour in November.

Betula pendula ssp. mandshurica

Dakota Pinnacle = **'Fargo'**

Developed and introduced by North Dakota State University, USA. It was selected from an open-pollinated population of *Betula pendula ssp. mandshurica* sown in 1986.

Narrow pyramidal habit. Dark green leaves, bark creamy white. Good for heavy and drought prone soils.

'Whitespire' or **'Whitespire Senior'** – see *Betula populifolia*

Betula pendula ssp. pendula

'Bangor'

This was named and propagated by Chris Sanders whilst at Bridgemere nursery and released in small numbers from around 1997 onwards. It originated in a research seed bed at Bangor University's Nantporth tree research nursery near Bangor in N Wales. It was identified as having potential as a new cultivar by employee Francis Gwyn Jones, who propagated it and transplanted it to his private garden in Bangor. Mr Jones showed it to Chris Sanders and invited him to take cuttings. It is a cut-leaved form similar to 'Dalecarlica/Laciniata' but much more vigorous than either of these.

'Bircalensis'

Found and cultivated in Finland.

With deeply incised triangular leaves.

'Boeugh's Variety'

Thought to be the same as Tristis.

'Crimson Frost'

Betula pendula ssp. szechuanica x *Betula pendula* 'Purpurea'

Named by Tom Pinney Jr in 1978. Propagated by Evergreen Nursery, Sturgeon Bay, Wisconsin, USA.

Bark of tan and white. Bright red new leaves become dark red later.

'Dalecarlica'

The original tree grew at Lilla Ornas, in the Swedish province Dalarna (Dalecarlia), but was killed in a storm in 1887. Photographs of the tree, of the leaves and branches survive (Hylander 1957).

Vegetative propagations had been made, however, and the cultivar was imported into the Netherlands in 1932. H.J. Grootendorst noted that most of the trees produced in the Netherlands were exported to Scandinavia, and very few planted specimens could be found in the Netherlands. He also was able to distinguish 'Dalecarlica' from 'Laciniata' on the basis of vegetative buds during the winter; rounded in 'Dalecarlica' and pointed in 'Laciniata'.

Tall slender tree. Cut leaves and drooping branchlets. Strong autumn colour.

'Dark Prince'

Purple leaved- darker leaved than 'Purpurea'.

'Elegans'

Originated at Bonamy's Nursery, Toulouse, France, about 1866.

Has erect leader and branches hanging almost perpendicular; may be the same as 'Tristis'.

'Fastigiata'

First distributed by Simon-Louis Freres, France before 1870.

A columnar form of the native Silver Birch.

'Golden Beauty'

Similar to 'Golden Cloud' below, but does not scorch as badly. Origin unknown.

'Golden Cloud'

See 'Schneeverdinger Goldbirke'.

'Gracilis'

Apparently originated in Moscow about 1888, and was grown by Spath Nursery, Germany as *Betula alba laciniata gracilis pendula* about 1930.

Small tree with various ascending branches (no main trunk), but with smaller twigs pendulous, hanging together in bundles; leaves more deeply lobed than 'Laciniata'.

'Laciniata'

A tree commonly grown in Sweden but thought to be a clone of German origin.

A handsome cut-leaved form. Usually wrongly sold as 'Dalecarlica'.

'Long Trunk' – see Hybrids at end

'Obelisk'

Found in the wild in northern France by P.L.M. van der Bom. Brought into cultivation in 1956 by Royal Nurseries Alphons van der Bom, Oudenbosch, Netherlands.

Extremely fastigiate form with stiffer branches than 'Fastigiata', bark very white.

'Purple Rain'

A selection made at Monrovia Nursery Company, Azusa, California, from open-pollinated seedlings of *Betula pendula* 'Purpurea' in 1987.

Slightly pendulous branches, new foliage displays lustrous, vivid purple colouring that is retained through the season.

'Purple Splendor'

Tree named and propagated by Darrold D. Belcher, Gresham, Oregon, USA. (Plant Patent No. 2107, November 28, 1961) Found as a red-leaved seedling in nursery that contained other green-leaved *Betula pendula*.

Tree with white bark, purple leaves, and drooping leader and branches.

'Purpurea'

Created in about 1870 in France. Origin unknown.

A most ornamental slow growing birch with purple leaves.

'Schneeverdinger Goldbirke'.

Raised by G Horstmann of Schneeverdingen, Germany in 1975. Often called 'Golden Cloud' in English speaking countries.

A true golden leaved form. Apparently scorches badly in the UK.

'Silver Cascade'

Graceful, weeping branches.

'Silver Grace'

This was selected by Bernard Ticknor of Fullers Mill, near Bury St. Edmunds and first propagated

by Ivan Dickings at Notcutts Nursery in 1980/81. It was originally thought to be a hybrid between *Betula pendula* and *utilis* or *jacquemontii* but is almost certainly just a good white stemmed form of *pendula*.

Graceful, semi-weeping form with larger, toothed leaves taking on butter-yellow autumn colour. Silver-white bark develops in time.

'Spider Alley' (syn. Silver Trestles)

Sourced and selected by Matt Lohan in Ireland.

It is a semi pendulous form with the branches twisting and curling in the manner of the contorted hazel.

'Swiss Glory'

See 'Zwitser's Glorie'

'Tristis'

Appeared in the Netherlands in 1867. Selected and distributed by Danplanex of Denmark.

Tall graceful tree with slender pendulous branches.

'Trost Dwarf'

Registered with the U.S. National Arboretum in 1984 by Richard Bush. A truly dwarf birch discovered in 1976 by Dieter Trost at Southern Oregon Nurseries, Medford, Oregon.

Leaves deeply dissected; a slow growing cut-leaf form.

'Viscosa' and **'Dentata Viscosa'**

Appeared about 1912 in France. Origin unknown.

A small bushy tree with coarsely toothed leaves; young growths sticky.

'White Edge' and **'Silver Edge'**

Variagated leaf, with a white edge all around the leaf. Can have a tendency to revert to green.

'Youngii'

Appeared in England about 1873. Origin unknown.

A mushroom headed, small weeping tree, used to be grafted high up on a standard but now propagated by tissue culture which seems to give it a higher stem.

'Zwitser's Glorie'

A compact and upright form of *pendula*. May be the same as 'Fastigiata'. Originated in Switzerland. Often called 'Swiss Glory' in English speaking countries.

Betula pendula ssp. szechuanica

'Liuba White'

From a tree collected by Roy Lancaster at 3500m in 1981 from Pa La Ho (Pa La river) above Liuba, south-west of Kangding, Sichuan, China. Selected by Kevin Croucher of Thornhayes nursery, Devon.

'Moonlight'

I can find no information about the origins of this cultivar name. It may be an invalid name.

'Pendula' – see 'Zhongdian Weeping' below.

'Zhongdian Weeping'

Named by Maurice Foster and Chris Brickell from a tree raised from seed collected at Zhongdian in N W Yunnan at 3350m (collection no CLD0126). Initially given the cultivar name of 'Pendula' but changed to comply with nomenclature rules. A weeping, less vigorous form, with an open spreading mushroom shaped crown , slender twigs weeping to the ground.

Betula populifolia

'Whitespire Senior' and 'Whitespire'

Originally thought to be from a *Betula pendula* ssp. *mandshurica* (syn. *Betula platyphylla* var. *japonica*) tree at Madison arboretum, University of Wisconsin, USA. Collected by John Creech (coll. no.235128) Shibuyu Onsen, Yatsugatake Mts., Honshu, Japan.1956.

The Whitespire Story: It was selected and introduced, in 1983, by Edward R. Hasselkus, University of Wisconsin-Madison and named *Betula platyphylla* var. *japonica* 'Whitespire', Whitespire Asian White Birch. Later it was realized that there had been an error in record keeping and that 'Whitespire' was a Grey Birch (*Betula populifolia*), not a selection of Asian White Birch, and it did not originate from the seeds collected by John L. Creech in Japan in 1951 as had been reported. Around 1993 this selection was renamed *Betula populifolia* 'Whitespire'. Unfortunately some nurseries still offer it as 'Whitespire' Asian White Birch even when they have adopted the correct scientific name. The cultivar name 'Whitespire' was applied to a vegetatively propagated clone of the original Wisconsin tree, which had not succumbed to bronze birch borer whereas many of the surrounding birch trees at this site had. As of 2006, the original 'Whitespire' tree, now 49 years old, is still free of bronze birch borer (Ed Hasselkus, personal communication). Unfortunately, the name Whitespire has also been applied to seed propagated material, that is to trees not genetically identical to the original tree. To emphasize this important difference, the cultivar name 'Whitespire Senior' is now used to designate clonal material from the original tree and 'Whitespire Junior' is used for trees propagated from seed of 'Whitespire Senior'.

Betula pubescens

'Armenian Gold'

This cultivar has yellow leaves.

'Arnold Brembo' – see *Betula pubescens* ssp. *pumila*

'Combe de Lechaud'

There is known to be a tree at RHS Wisley that appeared in 2000 from their propagation department but we have no more information.

'Crenata Nana'

A dwarf, round bush growing at the rate of 2 or 3 in. annually. Given its name and habit, it could possibly be a hybrid of *Betula nana*.

'Incisa'

Found in Sweden in 1914.

Deeply cut leaves.

'Silver Fountain'

I cannot find any information about this cultivar.

'Tortuosa' – see *Betula pubescens* ssp. *pumila*

'Variegata'

A tree of unknown origin described by C.Schneider from a specimen at the Moscow Botanic Garden.

White-variegated-stripped leaves that turn more green during the growing season, dense crown with some what twisted branches, and whiter bark than normal *Betula pubescens*.

'Yellow Wings'

This cultivar has yellow leaves.

Betula pubescens ssp. pumila (syn ssp. czerepanowii)

'Arnold Brembo'

A selection by Kenneth Ashburner from a tree at Stone Lane Gardens, Devon; most likely the Norwegian Namsskogan provenance of *Betula pubescens ssp. pumila* – see 'Tortuosa'. Named after a retired Norwegian army officer that Kenneth met and stayed with in Fauske, Norway. There is a fine specimen of this in Cambridge University Botanic Garden.

It has a perfect pyramidal shape – just as if it had been clipped and a very respectable white trunk. It leafs very early, usually by the end of January when its bright green young foliage is very conspicuous and apparently undamaged by frost. Slow growing.

'Tortuosa'

Name given to slow growing, short branched tree from Norway. Not a cultivar name but really *Betula pubescens ssp. pumila*.

Betula raddeana

'Hugh McAllister'

From a tree at Ness grown from seed collected at the edge of grazed meadows in Karachai-Cherkessk autonomous region, nr Karachayevsk, Northern Caucasus, Russia. Altitude 1600m. Collected by an American expedition with seed being distributed by the Cary Arboretum, New York State in 1980. Whiter barked, more fastigiate trees than some other *Betula raddeana* collections, though the species is under-researched.

Betula utilis ssp. albosinensis

'Bowling Green'

From the tree (now dead) which formerly grew beside the Bowling Green at Werrington Park, Cornwall. Collected by Wilson (coll no W4106) from Sichuan, China.

It has a rich chestnut bark, with similarly coloured buds and catkins which are freely produced. Rich outer bark peels to reveal a paler honey-coloured under layer.

'China Rose'

From a tree at Stone Lane Gardens, Devon. Sent out as seed by Dr Pan of the Chinese Academy of Forestry. Collected at Kaolan, near Lanchow, Gansu, China. 36 deg N 103 deg E.

This tree has more solidly red bark than most, with very little blooming.

'China Ruby'

Named by Brian Humphrey in 1994 from a 3-stemmed tree growing at Cambridge Botanic Garden (Accession no. 197800202 A, planted 1978/79) The Cambridge tree came from Hilliers nursery as

Betula albosinensis septentrionalis. The Hilliers tree was apparently grafted from a mature tree at Hilliers West Hill nursery in Winchester, which was lost when the site was built over. Harold Hillier said the West Hill tree came from Werrington Park, Cornwall (pers. comm. Roy Lancaster). Werrington Park had several of Wilson's introductions and this points to the cultivar 'China Ruby' being a clone of W4106 (see 'Chinese Garden' and 'Bowling Green'). Thanks to Lawrence Banks (Hergest Croft) for collating this information. This name was initially given in error by Stone Lane Gardens to the 'China Rose' cultivar. This error has now been rectified.

'Chinese Garden'

From a tree (now dead) in the Chinese Garden (originally the American Garden) at Werrington Park, Cornwall. Collected by Wilson (coll no W4106) from Sichuan, China. The rich pinkish bark is even darker than that of 'Bowling Green'.

'Clone F'

See 'Ness' below.

'Fascination' – see Hybrids at end.

'Conyngham'

grown from seed received by Kenneth Ashburner from a contact in China. Thought by Kenneth to be a cross of *Betula albosinensis* and some other species, but the mature trees I have seen appear to be pure *Betula albosinensis*. The trees were never planted at Stone Lane Gardens, but a batch of the original wild-origin trees were sold to Charles Lenox-Conyngham (pronounced Cunningham) in Kent and so Kenneth named the tree after him, as Kenneth did not think they were pure *Betula albosinensis*. A specimen was planted at Bicton College by Dick Fulcher probably between 1985-87. Kevin Croucher of Thornhayes nursery took grafts of the Bicton tree from 1989 until the early 1990s.

It has a stem that changes colour through the year from cream to pink and semi pendant branches with prolific large catkins.

'Joseph Rock'

A selection of unknown origin. Material given to Karan Junker of Junker's nursery by Kenneth Lorentzon. It is particularly narrow and upright in habit, forming a column. The bark is a good purple.

'Kansu'

May also be seen spelt as 'Gansu'. From a tree at Stone Lane Gardens, Devon. Sent out as seed by Dr Pan of the Chinese Academy of Forestry. Collected at Kaolan, near Lanchow, Gansu, China. 36 deg N 103 deg E.

'Kenneth Ashburner'

Selected from one of a group of controlled-pollination seedlings (Acc. No. 1997-0099) of a tree of the 'Chinese Garden' clone (Acc. No. 1978-0096) at Stone Lane Gardens, Devon. The parent tree, along with all the other controlled pollination seedlings, are now dead. Named by Kevin Croucher of Thornhayes nursery, Devon in 1997. It is a richer, deeper colour and more vigorous.

'Ness'

From a seedling at Stone Lane Gardens, Devon. Probably from seed sent out by Dr Pan of the Chinese Academy of Forestry. Collected at Kaolan, near Lanchow, Gansu, China. 36 deg N 103 deg E. Selected by Kevin Croucher of Thornhayes nursery, Devon. Initially known as Clone F from 1995, but then changed to 'Ness' in 1998.

'Pink Champagne'

From a tree at Stone Lane Gardens, Devon. Sent out as seed by Dr Pan of the Chinese Academy of Forestry. Collected at Kaolan, near Lanchow, Gansu, China. 36 deg N 103 deg E.

This particular tree has soft pale pink bark, caused by a persistent bloom of white betulin over the trunk.

'Red Panda'

From a tree at Wakehurst Place (acc. Number 140- 87 01144) raised from seed collected by American Steve Sponberg at 2500m from Shennongji county, Hubei, China as part of the Sino-American Botanical Expedition 1980 (1980 SABE 31). Named 'Red Panda' by Jim Gardiner (RHS Wisley) in 2008 due to the bears living in that locality. There is also a good specimen in Howards Field at RHS Wisley.

'Rhinegold'

Despite being shown in the RHS plantfinder, I can find no record of any nursery or garden having this cultivar.

'Ridgebourne' -see Betula 'Haywood' in Hybrids at end

'Sable'

Sold for a short while by Perryhill Nursery and reported as being from a tree at Wakehurst Place. Origin and propagator unknown. Dark barked.

'Septentrionalis Kansu'

from Gansu province, China. Probably sent out as seed by Dr Pan of the Chinese Academy of Forestry. Collected at Kaolan, near Lanchow, Gansu, China. 36 deg N 103 deg E.

A good strong growing form with multi-coloured copper and pink bark.

'Septentrionalis Purdom'

collected by William Purdom, plant hunter in the early 1900s. Thought to be from the Purdom 752 collection, now rare, which was collected from the Tow (Tao) River in western Gansu.

A beautiful stem of smoky mauves, buffs and satiny pinks.

Betula utilis ssp. jacquemontii

The Silver Shadow/Inverleith debate.

Many respected plantsmen are of the opinion that these are one and the same. However, some strongly disagree. People who have compared material from the original trees and subsequent clones of these trees are generally of the opinion that they both differ from typical *jacquemontii* in their hairy twigs. The original Silver Shadow tree came to Hilliers nursery from Edinburgh and this also points to a connection. However, when comparing younger, more recent clones there is some disagreement over the similarities, and some examples appear to be quite different. It is possible that one or both of these names has been wrongly applied to recent stock and this has resulted in trees being wrongly identified. Sadly the two original trees are no longer alive, so we cannot simply compare the two, and it is likely that this issue will never be resolved to anyone's satisfaction.

'Doorenbos'

Introduced by the famous Dutch plantsman, Albert Doorenbos. From a batch of *jacquemontii* seed received around 1933, origin unknown, of which the 'Doorenbos' tree stood out as distinctly different. Trade name of 'Snowqueen' given to it by Nick Dunn of Frank Matthews Ltd, but

'Doorenbos' is the older, correct cultivar name.

Thought to be a hybrid because:- male catkins are smooth, not knobbly; current seasons shoots are smooth and hairy; leaf shape is too ovate.

A beautiful form of *jacquemontii* producing a lovely white stem.

'Fastigate'

An upright, columnar selection giving a pillar of the beautiful white bark.

'Grayswood Ghost'

From a tree (now dead) at Grayswood Hill, Haslemere, Surrey. Home of the Pilkington family.

Origin unknown. Cultivar obtained by Tony Schilling in the early to mid 1970s just before the parent tree died. Named by Tony Schilling after he learnt of the death of the parent tree. A tree from the original grafted material exists at Wakehurst Place (054-71-05258).

Thought to be a hybrid because:- Current seasons shoots are too hairy and smooth; leaf is too ovate; too many pairs of leaf veins; veins too deeply impressed.

A strong vigorous birch with brilliant white bark.

'Gregory Birch'

From a tree at Werrington Park, Cornwall. Named by the owner Robert Williams after his head gardener R M Gregory (died 1954). Frank Knight told Mr Williams that the trees were raised from seed collected by R. M. Gregory somewhere in North West India (probably north of Simla, Dalhousie, Kasauli or Dagshai) during the Great War (1914-1919). Gregory served with 6th Devonshire regiment and Mr Williams discovered that they were in that part of India towards the end of the war.

Good, white bark. Strong growing tree.

'Inverleith'

From a tree at Edinburgh Botanic garden which has since died. There is a tree at Wakehurst Place that was directly grafted from this tree. It may be derived from seed sent by Hooker from Kew around 1881. May be the same as Silver Shadow although there is some debate about this. Named by Kenneth Ashburner and Tony Schilling in 1985.

Thought to be a hybrid because:- current seasons shoots too hairy and smooth; leaf is too ovate; too many pairs of leaf veins; veins too deeply impressed.

'Jermyns'

From a tree at Hilliers nursery, Hampshire. Original trees arrived via Belgium in the 1950-60's (from a Dutch nursery) from the same source as 'Doorenbos'. Looked different to 'Silver Shadow' so new cultivar created and named by Sir Harold Hillier and his head gardener Jack Bryce. It is possibly a hybrid.

Outstanding for the pure white bark on it's trunk and branches. Produces long catkins in spring. Good vigour.

Leaf shape similar to wild *jacquemontii*. Shoots glandulous like wild *jacquemontii*. More and deeper veins than *jacquemontii*. Overall very similar to *jacquemontii*.

'Kashmir White'

From seed collected from Lashpathri, above Sonnamarg, Kashmir in 1978 (collection L128A) by Roy Lancaster. Originally thought to be *Betula utilis ssp. occidentalis*, but unlikely as, like the Kyalang provenance, it is too far east and its characteristics are more like *jacquemontii*. Named by Roy Lancaster. Propagated by Brian Humphrey and then by a nurseryman in Oregon, USA. It can be susceptible to late frosts.

'Knightshayes'

From a tree at Knightshayes, Devon, origin unknown. Selected by Kevin Croucher of Thornhayes nursery, Devon.

A form with dazzling white stems and an unusual semi-pendulous habit of growth.

'Kyelang'

From a tree at Stone Lane Gardens. Sticky winter buds and quite twiggy growth. Not as clean a white as many of the *jacquemontii* selections. Collected by the Indian Forest Service (or possibly by Kenneth Ashburner) from Kyelang, Lahaul, NW India. Originally thought to be *Betula utilis* ssp. *occidentalis*, but unlikely as too far east and its characteristics are more like *jacquemontii*.

'Macbeth'

White bark. Larger than normal leaves with deep veins. It is highly probable that this is a misnaming of 'McBeath', as they are pronounced the same.

'McBeath'

From a tree grown from seed collected by Ron McBeath in Manali, Rhotang Pass, Himachal Pradesh, India at a height of 3000m on an open mountain slope (Coll. No McB 1737). In the wild the trees grew to 10m tall.

The parent of the cultivar is thought to be a tree at Dundee Botanic Garden (Acc. no. 1985-0606).

'Moonbeam'

From a tree at Wakehurst. Sometimes named as *Betula utilis* ssp. *occidentalis*, but unlikely because *occidentalis* is usually a poorer grower in the UK with less attractive bark and leaves like *pendula*. This has a good white trunk but is a smaller tree than other forms of *jacquemontii*.

'Pendula'

This may be the cultivar now known as 'Long Trunk'. See hybrids at the end. An old specimen exists at Miniers arboretum in Angiers, France.

'Pradhan'

I cannot find any information about this cultivar, except that Keshab C Pradhan did collect *Betula utilis* seed at 10-12000 feet in the Yumthang Valley, north Sikkim in the late 1980s and also from the Singalila Ridge between Sikkim and Nepal. The seed was probably widely distributed, so it may well have found its way to a nursery, either in Europe or the USA.

'Ramdana River'

From a tree at Stone Lane Gardens, Devon. Collected by Kenneth Ashburner from Ramdana River, Garwhal, Uttar Pradesh, India in 1991.

White bark, even on young trees, and glossy green foliage. Apparently it can suffer from late frost damage, though the trees in Stone Lane Gardens do not.

'Sauwala White'

Named by Tony Schilling and Kenneth Ashburner, reportedly from a wild collection by Stainton, Sykes and Williams (coll. No SSW 4382) on the 1954 RHS/British Museum expedition. From the valley of the Sauwala Khola, south of Dhaulagiri, central Nepal. The original tree was donated by Windsor Great Park to Wakehurst Place (acc.no 046-76-0308) but the cultivar was propagated from a tree (now dead) at RHS Wisley. There is divided opinion about the validity of this cultivar. It is now thought that this is at best a hybrid, possibly the result of a nursery mix-up with the original trees, so the origins are debatable. Certainly the leaf and twig characteristics are not like *jacquemontii* and point to a possible hybridising with *Betula pendula*.

'Silver Shadow'

From a tree at Hilliers West Hill nursery, Hampshire. Named by John Hillier. A tree from the original grafted material exists at RHS Wisley (W920277A). Like 'Inverleith' it has distinctly hairy shoots (unlike most *jacquemontii*), and the original certainly came from Edinburgh so may be the same thing. However, there is some debate about this.

Striking white bark, and large drooping dark leaves.

Leaf is ovate with 10-14 deep veins. Margins have teeth all same size. Shoots are smooth and hairy. So not like wild *jacquemontii* but more likely to be a hybrid.

Snowqueen – see 'Doorenbos'

'Snow Leopard'

Propagated from a tree at Stone Lane Gardens, Devon, UK by Garden Manager Paul Bartlett. The purpose of introducing this cultivar being to increase the number of commercially available true wild-origin *jacquemontii* of known provenance. The parent tree is one of a group of seedlings grown from seed collected in the wild by Oleg Polunin near Sonamarg in the Indian state of Jammu and Kashmir. Attractive, reliably white bark.

'Somerford'

I can find no reference to this cultivar anywhere, except that there is a tree at Valley Gardens, part of the Windsor Great Parks.

'Thyangboche Monastery'

Thyangboche Monastery is in the Khumbu region of Nepal, near Mt. Everest. There are no details available for this cultivar, but it is possibly from one of the trees collected by Tony Schilling just above Thyangboche (see *Betula utilis* 'Buddha'). However, his are darker barked trees, not *jacquemontii*.

'Trinity College'

From a tree at the original Trinity College Botanic Garden site at Ballsbridge in Dublin (as at 2007 the Berkeley Court Hotel) grown from seed sent by Hooker from Kew around 1883, possibly the same batch of seed that was sent to Edinburgh (see 'Inverleith'). The original parent tree was cut down when the old site was redeveloped. Cuttings from the original tree were taken by Professor Webb and successfully raised. These were then planted at the new Trinity College site at Dartry Road, Rathmines. The name was registered by Charles Nelson.

A good selection with gleaming, almost translucent white trunk from an early age and a narrow habit. Retains its leaves well into the autumn.

Thought to be a hybrid because:- leaf margin is too deeply incised, with vein-end teeth much larger than secondary teeth. Apart from this, it is the closest to *jacquemontii* of any established cultivars I have seen.

'Werrington'

This plant is known in the Dutch trade and appears to be a white barked *jacquemontii*. Given its name it is possible that the original trees came from Werrington Park in Cornwall. It could be the same as 'Gregory Birch' which is known to have been propagated from a tree of North West Indian origin in the Chinese Garden at Werrington. However, up till the 1980s there was also a white barked tree growing beside the Wilson 4106 *albosinensis* by the Bowling Green at Werrington.

'White Satin'TM

Selection by Dr. Hasselkus, Wisconsin, USA.

White bark, good yellow autumn colour.

Betula utilis ssp. occidentalis

We do not know of any cultivars having been produced, the ones below actually being *jaquemontii*. Certainly it is a tree that would be difficult to grow in the UK.

'**Kashmir White**' – see *Betula utilis ssp. jacquemontii*

'**Kyelang**' – see *Betula utilis ssp. jacquemontii*

Betula utilis ssp. utilis

'Bhutan Sienna'

From a tree at Stone Lane Gardens, Devon. Collected by Sinclair and Long in 1984 from West Bhutan. Originally named 'Nepalese Red' because it was wrongly thought to have come from East Nepal. This name is now obviously redundant and has been replaced by the name 'Bhutan Sienna'. This *utilis* has an attractive dark red bark with a brown tint.

'Buckland'

From the Garden House at Buckland Monachorum, Devon. It appears that there is a tree at the Garden House that was grown from seed given by Kenneth Ashburner to Vic Powlowski. This was selected for growing on as a cultivar by Vic and Keith Wiley and propagated for a while by Endsleigh nursery, Devon.

The tree has a pink bark.

'Buddha'

Selected by Chris Sanders from one of three trees growing at Ness Gardens, Wirral from seed collected upstream of Tengboche (Thyangboche) Monastery, Khumbu region, Nepal on 24th October 1976 by Tony Schilling at about 3800 metres (Coll. no. SCH2168) Given the name of 'Buddha' by Tony Schilling. Introduced by Bridgemere nursery in 1994. There are also trees from this collection number growing at Castle Howard.

Attractive underlying pinkish-brown bark thinly washed with white and contrasting coppery exfoliating bark strips. Heavily-veined, large, glossy leaves.

'China Bronze'

From a tree in Stone Lane Gardens, Devon. Collected by T. T. Yu in Yunnan, China. (Coll. no. YU10561) Dark metallic bark with a somewhat weeping habit.

'Dark Ness'

Named by Chris Lane & Chris Sanders from a plant growing at Ness Gardens, Wirral in 2000. The Ness tree was collected in Thimphu District, below Shodu, Bhutan at 3500m by Sinclair and Long (S&L 5540) in 1984. Propagated by Chris Lane. Nice dark shiny bark with conspicuous white lenticels and good upright habit.

'Edinburgh'

Named *Betula* 'Edinburgh' in the trade and thought to be a cross of *Betula utilis* and *Betula albosinensis* var. *septentrionalis*, grown at Edinburgh Botanic Garden. The name appeared in a 1986 Dendroflora article by Dr. P C De Jong. Propagated by Brian Humphrey, who actually doubts it is a cross with *albosinensis* and thinks it may have *ermanii* in it, though for the moment we are putting it with the *ssp. utilis*. Medium-size, fastigiate tree with ovate, glossy green leaves. Good whitish bark.

'Fascination' - see Hybrids at end.

'Forest Blush'

From Forrest's F19505 collection, Yunnan, China. This is often mis-spelt as Forrest Blush and I for one am guilty of this, an understandable mistake but one we aim to correct here. Named by Brian Humphrey in 1994. Thought to come from a tree at Edinburgh Botanic garden.

A fine white bark with a hint of pink. Smooth bark with prominent lenticels. Attractive elegant leaves. Also named as 'Marble Stem' by Kevin Croucher of Thornhayes nursery in 1998, as Kevin at the time was not aware of the previous name. However, 'Forest Blush' is the earlier and therefore correct name.

'Himalayan Pink'

See 'Nepalese Orange'

'Khumbu'

Selected by Chris Sanders from a tree growing at Ness Gardens, Wirral from Tony Schilling's SCH2168 collection (see 'Buddha' above).

Similar to 'Buddha', but from a different seedling with somewhat darker bark. Named by Chris Lane & Chris Sanders and propagated by Chris Lane.

'Marble Stem'

See 'Forest Blush'

'Moonbeam' – see *Betula utilis* ssp. *jacquemontii*

'Mt. Luoji'

From a tree at Stone Lane Gardens, Devon. Collected by Lord Howick from Mt. Luoji, Sechuan, China (Coll. no. H&M1480). Stunning dark brown bark with a hint of red together with patches of white bloom. A very rich bark colouring.

'Nepalese Orange'

From a tree at Stone Lane Gardens, Devon. Collected by Beer, Lancaster and Morris. Seed collected on steep wooded slope at 12,500ft above Topke Gola, E. Nepal on October 19th 1971 (coll. no. BL&M100).

Selected by Kenneth Ashburner. This form has a rich orange bark, with very noticeable horizontal bands of lenticels and soft blooming. A very attractive and unusual utilis. Not suitable for very frosty or exposed areas. From 1998 it was also offered in the trade under the name of 'Himalayan Pink' by Kevin Croucher of Thornhayes nursery. However, it is not sold under this name any more.

'Nepalese Red' – see 'Bhutan Sienna'

'Park Wood'

From a tree at Hergest Croft, Herefordshire (Cat. 1123). Origin unknown, though possibly from the Williams family. Mis-named *Betula utilis* var. *prattii* for many years, these chocolate barked birches (ranging from E. Nepal to Sechuan, China) are now being treated as just dark barked *Betula utilis* ssp. *utilis*.

A lovely birch much admired for its smooth dark chocolate bark and handsome shiny leaves.

'Ramdana River' – see *Betula utilis* ssp. *jacquemontii*

'Schilling'

This cultivar name is incorrect. It is actually the cultivar 'Buddha'.

'Sichuan Red'

From a tree at Stone Lane Gardens, Devon grown from material donated by Lord Howick. Collected by Simmons, Erskine, Howick, & McNamara on 28th September 1991 at 3440m from a tree to 8m, either epiphytic or regrowth from an old stump 1.5m in diameter, with golden brown exfoliating bark, growing with secondary shrubs on the west bank of Jiulong River north of Jiulong towards Jichou Pass, Sichuan, China. (Coll. no. SICH667). A lovely dark brown bark, overlain with orange and red. Very little bloom.

'Wakehurst Place Chocolate'

A dark barked *utilis*, the parent tree in Bethlehem Wood, Wakehurst Place. The Wakehurst trees were donated as grafts by Keith Rushforth from Westonbirt's Forrest collection (Forrest 15381-planted 1924, now dead) from Wa-Di-I Shan, circa 27deg 40min N. Plain chocolate bark which forms early.

'Werrington' – see *Betula utilis* ssp. *jacquemontii*

Hybrids

This section is devoted to those cultivars that are either of known and deliberate cross-pollination or are the result of chance cross-pollination. The majority fall into the latter group.

It is worth noting that a significant number of the older, established cultivars have dubious parentage which could easily have been the result of chance cross-pollination in botanical gardens and nurseries. Recent cultivars have generally come from trees of known wild-origin, where it is easier to establish the provenance. I am sure that further research into the characteristics of the cultivars will result in this 'Hybrid' section becoming longer, at the expense of the main body of cultivars.

Betula 'Crimson Frost' - see *Betula pendula*

Betula 'Dick Banks'

A sister seedling of *Betula* 'Hergest' which is white stemmed and has more qualities of *Betula ermanii*.

Betula 'Edinburgh' – see *Betula utilis*

Betula 'Fascination'

originally sent from England to the Netherlands wrongly labelled as *Betula caerulea-grandis* (now *Betula x caerulea*). One particular seedling was noticed by Herman Oterdoom and was considered worthy of cultivation. It was named by Herman Oterdoom and Dick van Gelderen in the late 70's to early 80's and grown by Dick van Gelderen at his Planten Tuin Esveld nursery, Boskop, Netherlands. It has been labelled as both *utilis* and *albosinensis* by nurseries. Photos of the parent tree in Esveld suggest it is more closely associated to the *Betula utilis* aggregate, but other photos and limited study of some other trees hint at a cross with *Betula ermanii*. Clearly more research needs to be done to determine its pedigree. In the meantime, given its dubious history I am putting it with the hybrids.

This selection has deep orange satin peeling bark turning a pale salmon-white, revealing layers of colours. Great vigour and good autumn colour.

Betula fetisowii

A slow growing excellent hybrid with creamy white bark.

***Betula* 'Haywood'**

Another sister seedling of '*Betula Hergest*', which is darker stemmed. This has also been called *Betula albosinensis* 'Ridgebourne' but should in future be identified by the earlier correct name of *Betula* 'Haywood'. The mis-naming as 'Ridgebourne' came about after Chris Lane selected it from a tree in the garden of one Margaret Owen. It has since been discovered by Lawrence Banks that Margaret Owen's tree is in fact a tree of the hybrid *Betula* 'Haywood', given to her by Dick Banks. A good vigorous form with dark coppery brown bark from an early age.

***Betula* 'Hergest'**

From a fine mature tree at Hergest Croft, Herefordshire. The parent tree is one of a group of chance hybrids of *Betula ermanii* and *Betula albosinensis* that happened at Hergest Croft. It exhibits more qualities of *albosinensis* than *ermanii*. The *albosinensis* parent was very probably a sister seedling of the W4106 collection ('Bowling Green', 'Chinese Garden'), as Hergest Croft received many plants from the Williams family c1910.

The bark is bronze when in shade and paler when grown in full sun.

***Betula* 'Long Trunk'**

This is commonly shown as either *Betula utilis* or *Betula pendula* in the nursery trade. Having looked at immature plants in our nursery, I wonder if it is a cross of both. It certainly appears to be a hybrid of some kind. Origin unknown. Good, white bark but untidy weeping habit.

'Mt Apoi'

Named by Danish workers at a *Betula* conference. Or possibly Kenneth Lorentzon. This genotype is thought to be a natural hybrid of *Betula ermanii* and *Betula fruticosa* and the correct species name is *Betula gmelinii*. It's old name of *Betula fruticosa* var. *apoiensis* has now been categorised as a form of *Betula gmelinii* ('The Genus *Betula* – McAllister & Ashburner).

From seed collected by Prof. Hideaki Ohba from Mt. Apoi, Hokkaido, Japan. Not a true *Betula ermanii* cultivar, but sometimes treated as one by the trade.

A small shrubby tree with creamy white bark.

***Betula* 'Royal Frost'**

Betula populifolia 'Whitespire' x *Betula* 'Crimson Frost' .

Persistent purple leaves and a white bark .

***Betula* x 'Charlotte'**

Raised by Chris Grey-Wilson from seed in an American garden. Named after Chris's daughter. Probably a *Betula albosinensis* hybrid. This information comes from Robert Vernon senior of Bluebell nursery.

Vigorous tree with creamy white and apricot bark which colours early on young stems. Good autumn colour.