Elaeagnus x ebbingei



Common name:	Elaeagnus	Family:	Elaeagnaceae
Author:	Boom.	Botanical references:	11, 200
Synonyms:			
Known Hazards:	None known		
Range:	A garden hybrid, E. macrophylla x E. pungens or E. x. reflexa.		
Habitat:	Not known in the wild.		
Plants For A Future Rating (1-5):	5		

Physical Characteristics

An evergreen shrub growing to 5m by 5m at a medium rate. It is hardy to zone 6 and is not frost tender. It is in leaf all year, in flower from October to January, and the seeds ripen from April to May. The scented flowers are hermaphrodite (have both male and female organs) and are pollinated by Bees. It can fix Nitrogen. We rate it 5 out of 5 for usefulness.

The plant prefers light (sandy), medium (loamy) and heavy (clay) soils, requires well-drained soil and can grow in nutritionally poor soil. The plant prefers acid, neutral and basic (alkaline) soils. It can grow in full shade (deep woodland) semi-shade (light woodland) or no shade. It requires dry or moist soil and can tolerate drought. The plant can tolerate maritime exposure.

Habitats and Possible Locations

Hedge, Woodland, Sunny Edge, Dappled Shade, Shady Edge, Deep Shade, In Walls, In North Wall, In South Wall, In East Wall, In West Wall.

Cultivar **'The Hague'**: Hedge, Woodland, Sunny Edge, Dappled Shade, Shady Edge, Deep Shade, In Walls, In North Wall, In South Wall, In East Wall, In West Wall.

Cultivar 'Southern Seedling': Hedge, Woodland, Sunny Edge, Dappled Shade, Shady Edge, Deep Shade, In Walls, In North Wall, In South Wall, In East Wall, In West Wall.

Cultivar 'Salcombe Seedling': Hedge, Woodland, Sunny Edge, Dappled Shade, Shady Edge, Deep Shade, In Walls, In North Wall, In South Wall, In East Wall, In West Wall.

Cultivar **'Limelight'**: Hedge, Woodland, Sunny Edge, Dappled Shade, Shady Edge, Deep Shade, In Walls, In North Wall, In South Wall, In East Wall, In West Wall.

Cultivar 'Gilt Edge': Hedge, Woodland, Sunny Edge, Dappled Shade, Shady Edge, Deep Shade, In Walls, In North Wall, In South Wall, In East Wall, In West Wall.

Cultivar 'Aurea': Hedge, Woodland, Sunny Edge, Dappled Shade, Shady Edge, Deep Shade, In Walls, In North Wall, In South Wall, In East Wall, In West Wall. Cultivar 'Coastal Gold': Hedge, Woodland, Sunny Edge, Dappled Shade, Shady Edge, Deep Shade, In Walls, In North Wall, In South Wall, In East Wall, In West Wall.

Edible Uses

Fruit; Seed.

Fruit - raw or cooked[177]. A reasonable size, it is about 20mm long and 13mm wide although it does have a large seed[K]. The fully ripe fruit has a very rich flavour and makes pleasant tasting with a slight acidity[K]. The fruit should be deep red in colour and very soft when it is fully ripe, otherwise it will be astringent[K]. The flavour improves further if the fruit is stored for a day or two after being picked. The fruit ripens intermittently over a period of about 6 weeks from early to mid April until May[K].

Seed - raw or cooked. It can be eaten with the fruit though the seed case is rather fibrous[K]. The taste is vaguely like peanuts[K].

Medicinal Uses

Disclaimer

Cancer.

The fruit of many members of this genus is a very rich source of vitamins and minerals, especially in vitamins A, C and E, flavanoids and other bio-active compounds. It is also a fairly good source of essential fatty acids, which is fairly unusual for a fruit. It is being investigated as a food that is capable of reducing the incidence of cancer and also as a means of halting or reversing the growth of cancers[214].

Other Uses

Hedge.

Plants can be grown as a hedge in very exposed positions, tolerating maritime exposure. The plants provide a very good protection from the wind, they are very resistant to damage by salt winds and are also tolerant of regular trimming[75]. They have a strong vigorous growth and are faster growing than E.

macrophylla[75, 200]. Because they fix atmospheric nitrogen, they make good companion plants and improve the growth of neighbouring species[K]. They can be planted in the line of an old shelterbelt of trees that is becoming bare at the base and will in time fill up the empty spaces and climb into the bottom parts of the trees[K].

Cultivation details

A very easily grown plant, it succeeds in most soils that are well-drained[11, 200]. Prefers a soil that is only moderately fertile, succeeding in poor soils and in dry soils[11, 200]. A drought resistant plant once established, it can be grown on top of Cornish hedges (drystone walls with earth between two vertical layers of stones). It is very tolerant of shade and grows well under trees[200]. Plants are very tolerant of maritime exposure, growing well right by the coast[K].

Plants are hardy to about -20°c, but they can be deciduous in very cold winters[200].

Fruiting as it does in early April to May, this plant has excellent potential as a commercial fruit crop in Britain. The fruit is of a reasonable size and when fully ripe is very acceptable for dessert[K]. It should be fairly easy to selectively breed for improved fruit size and flavour[K].

Not all plants bear many fruits, though many specimens have been seen that produce very heavy crops on a regular basis[K]. Since this is a hybrid species, yields may be improved by growing a selection of cultivars or one of the parent plants nearby for cross pollination. E. pungens is perhaps the best candidate for this and its cultivar E. pungens 'Variegata' has been seen on a number of occasions with good crops of fruit next to E. x ebbingei plants that are also laden with fruit[K]. The cultivar E. x ebbingei 'Gilt Edge' is also probably a good pollinator[K]. Other cultivars worth looking at are 'Salcombe Seedling', which is said to flower more abundantly than the type[200] and 'Limelight', which has been seen with a good crop of fruits even on small bushes[K].

This species has a symbiotic relationship with certain soil bacteria, these bacteria form nodules on the roots and fix atmospheric nitrogen. Some of this nitrogen is utilized by the growing plant but some can also be used by other plants growing nearby[200]. An excellent companion plant, when grown in orchards it can increase yields from the fruit trees by up to 10%.

Plants produce very aromatic flowers in late autumn and early winter[182].

This species is notably resistant to honey fungus[88, 200].

Sometimes whole branches die out for no apparent reason. This happens most frequently

when it is grafted onto E. multiflora[182]. These branches should be removed from the plant.

Propagation

Seed - this is a hybrid and it will not breed true from seed. If this is not a problem, then the seed is best sown as soon as it is ripe in a cold frame[78]. It should germinate freely within 4 weeks, though it may take 18 months[K]. Stored seed can be very slow to germinate, often taking more than 18 months. A warm stratification for 4 weeks followed by 12 weeks cold stratification can help[98]. The seed usually (eventually) germinates quite well[78]. Prick out the seedlings into individual pot as soon as they are large enough to handle and plant out when they are at least 15cm tall.

Cuttings of half-ripe wood, 7 - 10cm with a heel, July/August in a frame. Rather slow, but you usually get a good percentage rooting[78]. June is the best time to take cuttings[202].

Cuttings of mature wood of the current year's growth, 10 - 12cm with a heel, November in a frame. Leave for 12 months. Fair to good percentage [78].

Layering in September/October. Takes 12 months[78].

Scent

Flowers: Fresh

The flowers are sweetly and heavily scented.

Cultivars

'The Hague'
'Southern Seedling'
'Salcombe Seedling'
'Limelight'

This cultivar has variegated foliage and is slower-growing than the type species. It also has larger fruits than the type, a one year cutting less than 25cm tall had 15 good sized almost ripe fruits on it in early March, it had probably spent at least some of the winter indoors[K]. A large shrub at Hilliers Arboretum was flowering very heavily in mid-September 1994[K]. Since this is a hybrid species yields may be improved by growing one of the parent plants nearby for cross pollination. E. pungens is perhaps the best candidate for this[K].

'Gilt Edge'

This cultivar has been seen on a number of occasions with good crops of fruit. On these occasions it has always been close to E. x ebbingei and has sometimes also had E. pungens 'Variegata' growing nearby with a reasonable set of fruit[K].

'Coastal Gold'

'Aurea'

PFAF Web Pages

This plant is mentioned in the following web pages

- Plant For A Future Home Page
- Alternative Food Crops
- Alternative fruits
- PFAF Catalogue 1996/97
- PFAF Catalogue: Checklist of plants
- Edible Shrubs
- Elaeagnus x ebbingei A Plant for all Reasons.
- Hedges and their uses
- Why Perennials
- Woodland Garden Plants
- PFAF: Fruit Food of the Gods
- PFAF Plant Catalogue (D-E)

Web References

- [H] Details of Scandanavian and European Common names in <u>Henriette's</u> names database
- [G] <u>Data</u> (Common Names, Uses, Distribution) from the USDA/ARS NPGS's GRIN taxonomic database.
- [HP] <u>Links, Photos, Suppliers</u> from <u>Hortiplex</u> Plant Database

See the <u>PFAF Links Pages</u> for other sources or the <u>The Gatherer</u> where you can search many other sources all in one go.

References

[K] Ken Fern

Notes from observations, tasting etc at Plants For A Future and on field trips.

[11] **Bean**. **W.** *Trees and Shrubs Hardy in Great Britain. Vol 1 - 4 and Supplement.* Murray 1981

A classic with a wealth of information on the plants, but poor on pictures.

[75] Rosewarne experimental horticultural station. *Shelter Trees and Hedges.* Ministry of Agriculture, Fisheries and Food 1984

A small booklet packed with information on trees and shrubs for hedging and shelterbelts in exposed maritime areas.

[78] **Sheat. W. G.** *Propagation of Trees, Shrubs and Conifers.* MacMillan and Co

A bit dated but a good book on propagation techniques with specific details for a wide range of plants.

[88] **RHS.** *The Garden. Volume 112.* Royal Horticultural Society 1987 Snippets of information from the magazine of the RHS. In particular, there are articles on plants that are resistant to honey fungus, oriental vegetables, Cimicifuga spp, Passiflora species and Cucurbits.

[98] Gordon. A. G. and Rowe. D. C. f. Seed Manual for Ornamental Trees and Shrubs.

Very comprehensive guide to growing trees and shrubs from seed. Not for the casual reader.

[177] **Kunkel. G.** *Plants for Human Consumption.* Koeltz Scientific Books 1984 ISBN 3874292169

An excellent book for the dedicated. A comprehensive listing of latin names with a brief list of edible parts.

[182] **Thomas. G. S.** *Ornamental Shrubs, Climbers and Bamboos.* Murray 1992 ISBN 0-7195-5043-2

Contains a wide range of plants with a brief description, mainly of their ornamental value but also usually of cultivation details and varieties.

[200] **Huxley. A.** *The New RHS Dictionary of Gardening. 1992.* MacMillan Press 1992 ISBN 0-333-47494-5

Excellent and very comprehensive, though it contains a number of silly mistakes. Readable yet also very detailed.

[202] **Davis. B.** *Climbers and Wall Shrubs.* Viking. 1990 ISBN 0-670-82929-3 Contains information on 2,000 species and cultivars, giving details of cultivation requirements. The text is terse but informative.

[214] **Matthews. V.** *The New Plantsman. Volume 1, 1994.* Royal Horticultural Society 1994 ISBN 1352-4186

A quarterly magazine, it has articles on Himalayacalamus hookerianus, hardy Euphorbias and an excellent article on Hippophae spp.

[245] **Genders. R.** *Scented Flora of the World.* Robert Hale. London. 1994 ISBN 0-7090-5440-8

An excellent, comprehensive book on scented plants giving a few other plant uses and brief cultivation details. There are no illustrations.

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the project with <u>PayPal</u>

Readers Comments

Elaeagnus - Autumn Olive

Matt Trahan Mon, 17 Nov 1997

Just finished reading your very informative article at

http://www.scs.leeds.ac.uk/pfaf/elaeagns.html We grow Eleagnus 'russian olive' (unsure of species) as an evergreen hedge in our back yard here in northeastern North Carolina, U.S.A. It is also a very common shrub out on the outer banks of N.C. In our hot and humid climate (USDA zone 8) it will do ok in swales/waterlogged areas. In fact it acts almost as happy as a willow on a streambank.

Autumn olive is very common here as a hedge or specimen shrub. With its beautiful perfume and silvery leaves, it's very attractive. Unfortunately, it is now classed as an invasive pest by the Virginia Native(?) plant society. This plant was discussed during a lecture on invasive plants at the Maymont Flower and Garden show in Richmond Va. last Spring. Slides were shown of entire hillsides being taken over. I have to admit that the russian olive will reseed almost as easily as the autumn olive. Still not sure about ripping out the hedge though. It is very attractive, does provide great privacy and a wonderful perfume in fall. (sigh) Wonder if they said the same thing about purple loosestrife.

I appoligise for giving you such news, but I thought you might be interested in how well (too well) it does on this side of the Atlantic. I hope your findings are different in the UK.

Regards, Matt Trahan

Details of Growing Condition: USDA zone 8, Sunset zone 31, AHS heat zone 7, northeastern N.C..

Cross references: Genera: Elaeagnus. Web-pages: Elaeagnus x ebbingei - A Plant for all Reasons..

Add a Follow Up Follow Up to this comment

Elaeagnus x ebbingei

david nicholls Thu Oct 12 23:16:07 2000

I think this may the best performing plant so far on my ridiculously gale battered place, I've trialed about 150 reputedly coastal plants (it is still early days). This seems to be virtually the only species that actually makes progress during gales while virtually everything else gets cut back, including E. pungens. Only hail at around 100 k/hr made a dent, tore leaves more than on some things.

I think I have PFF mainly to thank for info on edibility, but would hate to admit that. I wonder if its' obsurity has anything to do with the awkward name it would never work in supermarkets (I suppose cafe society might think it is Italian or sophisticated) how about "Binge fruit", bingey, Bingy, bing, bingj?

Haven't tasted it yet.

Details of Growing Condition: new zealand.

Cross references: Web-pages: Elaeagnus x ebbingei - A Plant for all Reasons..

Add a Follow Up Follow Up to this comment

Elaeagnus - Autumn Olive

Myra Bonhage-Hale Sat May 12 20:45:00 2001

I am very interested in Autumn Olive (Elaeagnus umbellata) - have been trying to distill the flowers for essential oil and hydrosol - the aroma is not the same as the oh, so sweet and evocative smell of the flowers on the bush. In West Virginia, USA, it is considered invasive and exotic and is abhorred by farmers, especially cattle farmers. I am interested in finding a good use for this plant which has so many good attributes: nitrogen fixing, habitat for blue birds - and full of lycopene which is knwn to be an antioxidant - and perhaps a preventive action for chronic diseases including certain cancers. Seen as an enemy by most farmers in West Virginia, finding it to be a friend and useful appeals to my sometimes quixotic attitude toward life. Any help, any research, any comments will be appreciated. Myra Bonhage-Hale, La Paix Herb Farm, Alum Bridge, West Virginia email: lapaix@iolinc.net. Web Site: www.lapaixherbaljourney.com

Cross references: *Genera:* Elaeagnus. Web-pages: Elaeagnus x ebbingei - A Plant for all Reasons..

Add a Follow Up Follow Up to this comment

Elaeagnus x ebbingei

Klaus Wed Jun 6 21:39:00 2001

After we planted 4 e.x ebbingei in spring `00, in autumn we planted another 4 e.x e."gilt edge". The latter all didn`t survive the winter with -10° to -15°C. So maybe this variety isn`t as hardy as the species.

Details of Growing Condition: The location is near the town Verden in Lowersachsony. 650mm average, sandy soil, 6,2pH. 1324 hours of sun during the vegetation period. Hardyness zone 7. Rather windy, open fields in the main wind-direction to the horizon..

Add a Follow Up Follow Up to this comment

Elaeagnus - Autumn Olive

Larry Fri Oct 19 16:58:17 2001

I have had an Elaeagnus - Autumn Olive hedge here in Va for about 15 years (just south of DC). Quite leggy just now and to be cut back soon. Surprised to find it now on the "Invasive" list (and to find its relative Russian Olive listed as a noxious weed in Utah) as I acquired this hedge in bare root form from the state of Va!

I also have an Ebbingei hedge across the front yard, a far superior hedge in my opinion, well knit togather but a B***h to trim due to the resinouus dust from the leaves in early autum and in this area it really needs trimming twice a year. Questions:

The Autum hedge I can trim back almost to stumps and it returns with vengence, how far back can the Ebbingei be safely cut, and when is this best done? In propagating the Ebbingei, I could use a bit more detail, for example, what is ment by "with heel" when taking clippings.

Thanks

Details of Growing Condition: Just south of DC (ZIP 22306), predominently low grade fill dirt with deposits of marine slip clay, water table about ten feet down, area known as "Death Valley" by the local plant shops..

Cross references: *Genera:* Elaeagnus. Web-pages: Elaeagnus x ebbingei - A Plant for all Reasons..

Add a Follow Up Follow Up to this comment

Elaeagnus - Autumn Olive

Fri Oct 19 17:22:06 2001

I am confuzzeled here. I understand that Autum Olive is Elaeagnus angustifolia (oringe/red berries), common in the Virginias while Umbellata is the Russian Olive (Yellow berries) rare her but common in the West.

Cross references: Plants: Elaeagnus angustifolia, Elaeagnus umbellata. Genera:

Elaeagnus. Web-pages: Elaeagnus x ebbingei - A Plant for all Reasons..

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Elaeagnus x ebbingei - A Plant for all Reasons.

Mike Hardman Fri Nov 2 18:04:24 2001

I have seen thickets of a species of Elaeagnus growing in gently rolling hills west of Calgary, Canada. I do not know which species it was, but I thought I'd mention it since there has been mention here of doubts about hardiness of X ebbingei in the far north of the UK (I am thinking of my sister in Caithness). Maybe there is scope for crossing with this Canadian species - which must be darn hardy. Oh, the species I saw had plain silvery leaves and grew about 9ft tall, spreading by suckers.

Details of Growing Condition: Gravelly clays a few miles west of Calgary, Canada.

Cross references: *Genera:* Elaeagnus. Web-pages: Elaeagnus x ebbingei - A Plant for all Reasons..

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Elaeagnus x ebbingei - A Plant for all Reasons.

Dave () Wed Jun 15 21:15:35 2005

The plant you saw growing near Calgary was almost certainly Elaeagnus commutata, aka "Wolf Willow" (though not a willow at all). Drought hardy, and excellent fodder for birds; invasive, to some, but aren't we all?

Cross references: *Genera:* Elaeagnus. Web-pages: Elaeagnus x ebbingei - A Plant for all Reasons..

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Elaeagnus - Autumn Olive

Donna & Ernie Beauvais (mockingbirdhill@verizon.net) Sun Dec 18 16:06:37 2005

We made Autmn Olive jam for the first time this year. It was delicious! Followed a standard berry jam receipe in the Ball canning book and adjusted the sweetness to taste.

Right now it is WINTER in Western Michigan and we have large flocks of Cedar Waxwings and Bluebirds feasting on the Autumn Olive berries that are left. By spring the bushes will be bare. Cardinals and Snowbirds also enjoy them. Problem keeping the rabbits from eating all of the shoots off during the winter. It (along with American Bittersweet) appears to be a favored food. Once the bushes get over 2 - 3 inch diameter, the rabbits leave them alone. It's a great multi-purpose plant.

Details of Growing Condition: Western Michigan, near Lake Michigan Growing in pure beach sand, no water & no care!.

Cross references: *Plants:* <u>Autumn Olive</u>, <u>Autumnberry</u>, <u>Aki Gumi</u>. Genera: <u>Elaeagnus</u>. Web-pages: <u>Elaeagnus x ebbingei - A Plant for all Reasons</u>.

Add a Follow Up Follow Up to this comment

Elaeagnus - Autumn Olive

Bill Earle (bill.earle@gmail.com) Tue Sep 12 23:46:48 2006

Here in northern Virginia the autumn olive has definitely crosses over into the pest / invasive plant. In abandonded pastures for example it can totally take over the predominant flora to the point of creating a dense and prickly cover. It also tends to be a host for persistent vines that create domes and tangled undergrowth that's impenerable to animals and humans alike. It does grow particularly well at the sunny edge. Unfortunately it tends to over power more desireable flora like dogwoods, evergreens and wild flowers. I'm pulling out as much of this pest as I can to open up the landscape!

Cross references: *Genera:* Elaeagnus. Web-pages: Elaeagnus x ebbingei - A Plant for all Reasons..

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