Prunus armeniaca

Scientific Name

Prunus armeniaca L.

Synonyms

Amygdalus armeniaca (L.) Dumort., Armeniaca armeniaca Huth nom. illeg. tautonym, Armeniaca bericoccia Delarbre, nom. illeg., Armeniaca communis Besser, Armeniaca epirotica G. Gaertn., B. Mey., & Scherb., Armeniaca macrocarpa Poit. & Turp. ex Duhamel, Armeniaca vulgaris Lam., Prunus armeniaca var. typica Maxim, Prunus armeniaca L. var. vulgaris (Lam.) Zabel, Prunus tiliaefolia Salisb. nom. illeg. superfl.

Family

Rosaceae

Common/English Names

Apricot, Chinese Almond, Common Apricot, Siberian Apricot.

Vernacular Names

Albanian: Kajsi; Argentina: Damasco; Armenian: Tziran; Bosnian: Kajsija; Brazil: Abricó, Damasco, Damasqueiro (Portuguese); *Catalan*: Albercoc: Chile: Damasco; Chinese: Ku Xing Ren, Xing, Xing Xin Shu; Croatian: Kajsija; Czech: Meruňka, Meruňka Obecná; Danish: Abrikos, Almindelig Abrikos; Dutch: Abrikoos; Eastonian: Aprikoos, Harilik Aprikoosipuu; Esperanto: Abrikoto; Finnish: Aprikoosi; French: Abricotier, Abricotier Commun; German: Aprikose, Aprikosenbaum, Marille; Greek: Βερίκοκο; Haitian: Zabriko; Hungarian: Kajszibarack, Sárgabarack; Icelandic: Apríkósa; Iran: Zard-ālū; Irish: Aibreog; Italian: Abricocco Comune, Albicocco, Armenillo; .Japanese: Anzu; Korean: Sal-Goo, Hoeryngbaeksalkunamu; Kurdish: Mijmij, Qeysî, Zerdelî, Hêrûg; Latvian: Aprikoze; Lithuanian: Abrikosas; Maltese: Berguga; Norwegian: Aprikos; Polish: Morela; Portuguese: Damasco, Damasci Italbrac, Damasqueiro;

Roman: Kajsija, Zerdelica; Romanian: Caisă; Russian: Abrikos Obyknovennyj; Slovenia: Marelica, Marhul'a Obyčajná; Spanish: Albaricoque, Albaricoquero, Albercoquer, Chabacano, Chabacano Italbrac Mexico, Damasco, Damasquino, Damasquillo; Swedish: Aprikos; Turkish: Kayisi.

Origin/Distribution

The native range of apricot is somewhat unclear due to its extensive prehistoric cultivation, but has been regarded to be the northern, north-western and north-eastern provinces of China (Qinghai, Gansu, Shaanxi, Hebei, Liaoning) and possibly also Korea and Japan. Domestic cultivation in China dates back over 3,000 years ago. It spread to Asia Minor and was introduced to Europe through Greece and Italy by the Romans. Apricot was introduced into North America by English travellers and by Spanish missionaries into California. Apricot is extensively cultivated in Eurasia and America. Secondary centres of diversity with locally adapted races can be found in Middle Asia, Caucasus, Iran, and less so in southern Europe and southern USA.

Agroecology

In its native range, apricot is found in sparse forests on mountain slopes, slopes, gullies, from 700-3,000 m altitude. Apricot is a cool temperate climate species although it can grow in a Mediterranean climate. It is winter-hardy enough to survive temperatures down to -30° C, they prefer stable winter temperature and are sensitive to winter temperature fluctuations. Spring frost is the limiting factor. Apricots require chilling requirement to break dormancy of 600-1270 chill units and a heat requirement for flowering of 4078 and 5879 growing degree hours (GDH) (Ruiz et al. 2007). Apricots prefers deep, fertile, well-drained, well-aerated soils with a pH of 6.0-7.0 It grows on loessial, loamy and marl or sandy soils, and are intolerant of saline and waterlogged soils. During the dry months irrigation is required to sustain good yields. Watering is carried out before and after blossoming, 10–15 days before the beginning of fruit maturity and after harvest. Apricot is responsive to potash fertilisers.

Edible Plant Parts and Uses

Ripe apricots are delicious when eaten fresh or slightly chilled on their own or in fruit salads. Whole or halved apricots coated lightly with honey on skewers and grilled are fabulous. The fruits can be poached in water or fruit juice to which clove or cinnamon can be added to enhance the flavour. The fruit can be frozen, preserved and canned. Apricots can be made into excellent jams, jellies, puree, nectar, juice, drinks and sauces. Apricot jams are fabulous with toast. Apricot nectar or juice is an excellent and nutritious drink and is available in cans or bottles. Puree can be made into sauces which are excellent with cold cut or in meat sandwiches. Dried apricots are nutritious and delicious and are excellent snacks. Apricots fruits both fresh or dried or sauces can be used in wide array of desserts - pancakes, cakes, bread, muffins, croissant, pies, crumble, custard tart, strudel, flan, ice-cream, smoothes, milk-shakes, apricot fruit bars, apricot coconut candy balls and apricot cream. Apricots are excellent with low fat cottage cheese.

Apricot seeds especially those grown in central Asia and around the Mediterranean area are so sweet that they may be substituted for almonds. In Turkey, the sweet kernels of some cultivars are eaten as roasted and salted tidbits and in baked products. The Italian liqueur Amaretto and Amaretti Biscotti are flavoured with extract of apricot kernels rather than almonds. In India, apricot seed oil is used for cooking.

Botany

A small- to medium-sized tree with a dense, spreading, round or elongated oblong canopy 4-8(-12) m tall with grayish brown, longitudinally splitting bark. young branchlets are reddish

Plate 1 Apricot inflorescence





Plate 2 Close-up of apricot flower



Plate 3 Immature apricot fruits and leaves

brown and lenticellate. Winter buds are purplish red, ovoid, glabrous or puberulous. Leaves are alternate and borne on 2-3.5 cm petioles, glabrous or pubescent, basally usually with 1-6 nectaries (Plates 3, 4, 5). Lamina is broadly ovate to subcordate, $5-9 \times 4-8$ cm, both surfaces glabrous, green, margin crenate, apex acute to shortly acuminate and base cuneate. Flowers solitary or occasionally paired, opening before leaves, 2-4.5 cm across, bisexual; sepals 5 purplish green, ovate to ovate-oblong, reflexed after anthesis, petals 5 white, pink, or tinged with red, orbicular to obovate; stamens 20-100, slightly shorter than petals with white filaments and yellow anthers; ovary pubescent with style slightly longer to nearly as long as stamens (Plates 1-2). Fruit a drupe, globose, ovoid, or rarely obovoid, 2.5–4 cm in diameter, smooth at maturity, pubescent when young, pale green (Plate 4) turning yellow or orange often flushed with red with a fleshy, succulent, white, yellow or orange-coloured outer layer (mesocarp) surrounding a hard, globose, ovoid, or ellipsoid, compressed laterally stone (endocarp) ridged along suture containing the seed (Plates 3, 4, 5, 6). Seeds are flat, obovate with dense light painted skin, bitter or sweet.

Nutritive/Medicinal Properties

Food value of raw, apricot fruit (refuse 7% pit) per 100 g edible portion was reported as follows (USDA 2011): water 86.35 g, energy 48 kcal

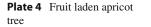






Plate 5 Ripening apricot fruits



Plate 6 Ripe apricot fruit and seed

(201 kJ), protein 1.40 g, total lipid (fat) 0.39 g, ash 0.75 g, carbohydrate 11.12 g; fibre (total dietary) 2.0 g, total sugars 9.24 g, sucrose 5.87 g, glucose 2.37 g, fructose 0.94 g, maltose 0.06 g; minerals - calcium 13 mg, iron 0.39 mg, magnesium 10 mg, phosphorus 23 mg, potassium 259 mg, sodium 1 mg, zinc 0.20 mg, copper 0.078 mg, manganese 0.077 mg, selenium 0.1 μ g; vitamins - vitamin C 10 mg, thiamine 0.030 mg, riboflavin 0.040 mg, niacin 0.600 mg, pantothenic acid 0.240 mg, vitamin B-6 0.054 mg, folate (total) 9 µg, total choline 2.8 mg, vitamin A 1926 IU (96 μ g RAE), vitamin E (α -tocopherol) 0.89 mg, vitamin K (phylloquinone) 3.3 µg, lipids - fatty acids (total saturated) 0.017 g, 16:0 (palmitic acid) 0.014 g, 18:0 (stearic acid) 0.003 g; fatty acids (total monounsaturated) 0.170 g, 18:1 undifferentiated (oleic acid) 0.170 g; fatty acids (total polyunsaturated) 0.077 g, 18:2 undifferentiated (linoleic acid) 0.077 g, phytosterols 18 mg, β -carotene 1094 μ g, α -carotene 19 μ g, β -cryptoxanthin 104 μ g, lutein+zeaxanthin 89 μ g; amino acids – tryptophan 0.015 g, threonine 0.047 g, isoleucine 0.041 g, leucine 0.077 g, lysine 0.097 g, methionine 0.006 g, cystine 0.003 g, phenylalanine 0.052 g, tyrosine 0.029 g, valine 0.047 g, arginine 0.045 g, histidine 0.027 g, alanine 0.068 g, aspartic acid 0.314 g, glutamic acid 0.157 g, glycine 0.040 g, proline 0.101 g and serine 0.083 g.

Apricot is extremely rich in pro-vitamin A carotenes and vitamin A and phenolic compounds. Among the 37 apricot varieties, the total carotenoid content ranged from 1,512 to 16,500 μ g/100 of edible portion, with β carotene as the main pigment followed by β -cryptoxanthin and γ -carotene (Ruiz et al. 2005b). The carotenoid content was correlated with the color measurements, and the hue angle in both flesh and peel was the parameter with the best correlation ($R^2=0.92$ and 0.84, respectively). Four phenolic compound groups, procyanidins, hydroxycinnamic acid derivatives, flavonols, and anthocyanins, were identified in the fruit of 37 apricot varieties (Ruiz et al. 2005a). Chlorogenic and neochlorogenic acids, procyanidins B1, B2, and B4, and some procyanidin trimers, quercetin 3-rutinoside, kaempferol 3-rhamnosyl-hexoside and quercetin 3-acetyl-hexoside, cyanidin 3-rutinoside, and 3-glucoside, were detected and quantified in the skin and flesh of the different cultivars. The total phenolics content, ranged between 32.6 and 160.0 mg/100 g of edible tissue. No correlation between the flesh colour and the phenolic content of the different cultivars was observed.

The major fatty acids in apricot kernel oil were oleic, linoleic and palmitic (El-Aal et al. 1986). Chloroform-methanol extracts consisted mainly of neutral lipids in which triglycerides were predominant components. The triglycerides consisted of six types of glycerides. Glycolipids and phospholipids were the minor fractions of the total lipids and their major constituents were acylsterylglycosides (62.3%) and phosphatidyl choline (72.2%), respectively. Evaluation of the crude apricol kernel oil added to different types of biscuits and cake revealed that it has excellent properties and is comparable with corn oil at the same level. In another study, the total oil contents of apricot kernels in Turkish apricot cultivars ranged from 40.23% to 53.19% (Turan et al. 2007). Oleic acid contributed 70.83% to the total fatty acids, followed by linoleic (21.96%), palmitic (4.92%), and stearic (1.21%) acids. The sn-2 fatty acid position is mainly occupied with oleic acid (63.54%), linoleic acid (35.0%), and palmitic acid (0.96%). Eight triacyglycerol species were identified: LLL, OLL, PLL, OOL+POL, OOO+POO, and SOO (where P, palmitoyl; S, stearoyl; O, oleoyl; and L, linoleoyl), among which mainly OOO+POO contributed to 48.64% of the total, followed by OOL+POL at 32.63% and OLL at 14.33%. Four tocopherol and six phytosterol isomers were identified and quantified; among these, γ -tocopherol (475.11 mg/kg of oil) and β -sitosterol (273.67 mg/100 g of oil) were predominant.

Gezer et al. (2011) reported apricot kernel of 5 Turkish cultivars to have moisture content 2.18– 3.25%, 28.26–42.48% crude oil, 96.75–97.82% dry matter, 15.7–18.3% crude protein, crude fibre 28.26–42.48% and ash 15.3–17.1%. The mineral content of the kernel comprised 11,090–9,190 ppm K, 1,344.5–2,909.6 ppm Ca, 1,323.7–1,960 ppm Mg, 4967.5–9387.2 P, 964.9– 1347.7 ppm Na, 97.9–138.8 ppm B, 55.0– 87.3 ppm Al, 51.0–60.7 Zn, 30.2–45.2 ppm Fe, 10.3–22.0 ppm Cu, 6.5–14.4 ppm Mn, 4.3– 7.7 ppm Cr and 0.6–4.5 ppm Ni.

Three isomeric A-type proanthocyanidins were isolated from the root of *Prunus armeniaca*. They were identified as ent-epiafzelechin- $(4\alpha \rightarrow 8; 2\alpha \rightarrow O \rightarrow 7)$ -epiafzelechin (mahuannin A), ent-epiafzelechin- $(4\alpha \rightarrow 8; 2\alpha \rightarrow O \rightarrow 7)$ -(+)afzelechin and ent-epiafzelechin- $(4\alpha \rightarrow 8; 2\alpha \rightarrow O \rightarrow 7)$ -(-)-afzelechin, (Prasad et al. 1998; Rawat et al. 1999) and a new aromatic glycoside, 4-Oglycosyloxy-2-hydroxy-6-methoxyacetophenone (Prasad 1999).

Antioxidant Activity

Considerable variation was observed in 29 apricot cultivars in the total phenol content (0.3–7.4 mg gallic acid equivalent/g FW(fresh weight)) and total antioxidant capacity (0.026–1.858 mg ascorbic acid equivalent/g FW), with the American origin cultivars Robada and NJA(2) and the new cultivar Nike exhibiting the greatest values (Drogoudi et al. 2008). The cultivar Tomcot and hybrid 467/99 had the highest content of total carotene (37.8 μ g β -carotene equivalent/g FW), which was up to four times greater as compared with the rest of studied genotypes. The dominant sugar

in fruit tissue was sucrose, followed second by glucose and third by sorbitol and fructose-inositol. The new cultivars Nike, Niobe, and Neraida contained relatively higher contents of sucrose and total sugars, while Ninfa and P. Tirynthos contained relatively higher contents of K, Ca, and Mg. Correlation analysis suggested that late-harvesting cultivars/hybrids had greater fruit developmental times ($R^2=0.817$) and contained higher sugar $(R^2=0.704)$ and less Mg contents $(R^2=-0.742)$ in fruit tissue. The total antioxidant capacity was better correlated with the total phenol content $(R^2=0.954)$ as compared with the total carotenoid content ($R^2 = 0.482$). Weak correlations were found between the fruit skin colour and the antioxidant contents in flesh tissue.

Studies demonstrated that 1-methylcyclopropene (1-MCP) treated fruits exhibited higher superoxide dismutase (SOD) activity, whereas unspecific peroxidase (POX) activity was significantly higher only after 21 days at 2°C (Egea et al. 2010). Treated fruits also exhibited better retention of ascorbate and carotenoids and higher TEAC (trolox equivalent antioxidant capacity) during storage. In accordance with these observations, lower ion leakage values were detected in 1-MCP-treated apricots. The results suggested that 1-MCP conferred a greater resistance to oxidative stress. This, along with the reduction in ethylene production, could contribute to the increase in commercial life and nutritional value observed in 1-MCP-treated apricots.

In contrast to extracts of the bitter apricot kernels, both the water and methanol extracts of sweet kernels had antioxidant potential (Yiğit et al. 2009). The highest percent inhibition of lipid peroxidation (69%) and total phenolic content $(7.9 \,\mu\text{g/ml})$ were detected in the methanol extract of sweet kernels (Hasanbey) and in the water extract of the same cultivar, respectively. Roasting was found to affect he antioxidant properties of peeled, defatted and roasted apricot kernel flours (Durmaz and Alpaslan 2007). Contrary to browning degree, radical scavenging power (RSP), reducing power (RP), and total phenolic content (TPC) did not increase linearly but showed a maximum for 10 minutes of roasting. Roasting reduced the anti-lipid peroxidative activity (ALPA) values,

thus unroasted sample showed the highest ALPA value. RSP, RP and TPC measurements of all samples, were in high correlation ($R^2=0.92$). Primary metabolites (sugars, organic acids) and secondary metabolites (phenolics) were quantified in the fruit of 13 apricot cultivars (Schmitzer et al. 2010). Total sugars ranged from 59.2 to 212.5 g/ kg FW and total organic acids from 4.2 to 20.8 g/ kg FW. Four hydroxycinnamic acids and three flavonols were quantified; their content was significantly higher in skin compared to pulp. Similarly, antioxidative potential was significantly higher in skin and ranged from 125.4 to 726.5 mg ascorbic acid equivalents/kg FW. A positive correlation between total phenolic content and antioxidant potential was determined.

Cardioprotective Activity

Studies demonstrated in-vivo cardio-protective activity of apricot-feeding related to its antioxidant phenolic contents in rats subjected to myocardial ischemia-reperfusion (Parlakpinar et al. 2009) Infarct sizes were found significantly decreased in 10% (55.0%) and 20% (57.0%) apricot-fed groups compared to control group (68.7%). Light and electron microscopic evaluations of the heart also demonstrated similar beneficial effects on ischemia-reperfusion injury in apricot-fed both groups. Total phenolic contents, DPPH radical scavenging and ferric-reducing power as in vitro antioxidant capacities of rat chows were significantly increased after supplementation with apricot for each ratio. Cu, Zn Superoxide dismutase (Cu, Zn SOD) and catalase (CAT) activities were increased, and lipid peroxidation was decreased significantly in the hearts of 20% apricot-fed group after I/R.

Gastroprotective Activity

Studies showed that apricot and β -carotene had potent protective effect against methotrexateinduced intestinal oxidative damage in rats and ameliorated MTX (methotrexate)-induced intestine damage at biochemical and histological levels (Vardi et al. 2008). Single or combined application of apricot and β -carotene ameliorated all of these hazardous effects in antioxidant system in MTXtreated groups. The hazardous effects observed In the MTX group included fusion and shortening in the villus, epithelial desquamation, crypt loss, inflammatory cell infiltration in the lamina propria, goblet cell depletion and microvillar damage were observed in the small intestine. Parallel to histological results, malondialdehyde (MDA) content and myeloperoxidase (MPO) activity were found to be increased, whereas superoxide dismutase (SOD), catalase (CAT), glutathione peroxidase (GP-x) activities and glutathione (GSH) content were decreased in the MTX group.

Hepatoprotective Activity

Studies showed that apricot feeding had beneficial effects on CCl4-induced liver steatosis and damage probably due to its antioxidant nutrient (β-carotene and vitamin) contents and high radical-scavenging capacity (Ozturk et al. 2009). Dietary intake of apricot could reduce the risk of liver steatosis and damage caused by free radicals. In the CCl4 group, vacuolated hepatocytes and hepatic necrosis were seen, especially in the centrilobular area. Hepatocytes showed an oedematous cytoplasmic matrix, large lipid globules and degenerated organelles. The area of liver injury was found significantly decreased with apricot feeding. Malondialdehyde and total glutathione levels and catalase, superoxide dismutase and glutathione peroxidase activities were significantly changed in the carbon tetrachloride group and indicated increased oxidative stress. Apricot feeding decreased this oxidative stress and ameliorated histological damage.

Antinociceptive and Antiinflammatory Activities

The intramuscular injection of amygdalin significantly reduced the formalin-induced tonic pain in both early (the initial 10 minutes after formalin injection) and late phases (10–30 minutes following the initial formalin injection) (Hwang

et al. 2008). During the late phase, amygdalin did reduce the formalin-induced pain in a dose-dependent manner in a dose range less than 1 mg/kg. Molecular analysis targeting c-Fos and inflammatory cytokines such as tumour necrosis factor- α (TNF- α) and interleukin-1 β (IL-1 β) also showed a significant effect of amygdalin, which matched the results of the behavioural pain analysis. These results suggested amygdalin to be effective at alleviating inflammatory pain and that it can be used as an analgesic with antinociceptive and antiinflammatory activities.

Antimicrobial Activity

Flavonoid glycosides, 4',5,7-trihydroxy flavone-7-O-[β-D-mannopyranosyl $(1''' \rightarrow 2'')$]- β -Dallopyranoside (1) and 3,4',5,7-tetrahydroxy-3',5'-di-methoxy flavone 3-O-[α -L-rhamnopyranosyl $(1'' \rightarrow 6'')$]- β -D-galactopyranoside (2), were isolated from the butanolic fraction of the fruits (Rashid et al. 2007). The butanolic extract exhibited antibacterial activity against both Gram positive and Gram negative bacteria. The butanolic extract was more effective against growth of Gram-positive bacteria (MIC values 31.25-250 μ g/ml) with the highest activity exhibited against Micrococcus luteus (MIC 31.25 µg/ml) This was followed by Bacillus subtilis and Corynebacterium diptheriae both with MIC 62.5 µg/ml. The MICs for Staphylococcus epidermis and Mycobacterium smegmatis were 125 µg/ml. The MICs for Staphylococcus aureus, Streptococcus faecalis, Streptococcus pyogenes and Mycobacterium fortuitum were 250 µg/ml. The MIC for Methicillin resistant Staphylococcus aureus (MRSA) was 78.125 µg/ml. The MICs of the extract for the Gram negative bacteria range from 125 µg/ml for the Salmonella typhi, Salmonella paratyphi A, Salmonella paratyphi B, Proteus mirabilis, Proteus vulgaris and Shigella dysenteriae to 250 µg/ml for Enterobacter aerogenes. The lowest activity was against the enteropathogenic Escherichia coli with an MIC of 500 µg/ml.

In another study, the most effective antibacterial activity was observed in the methanol and water extracts of bitter apricot kernels and in the methanol extract of sweet kernels against the Gram-positive bacteria *Staphylococcus aureus* (Yiğit et al. 2009). Additionally, the methanol extracts of the bitter kernels were very potent against the Gram-negative bacteria *Escherichia coli* (0.312 mg/ml MIC value). Significant anticandida activity was also observed with the methanol extract of bitter apricot kernels against *Candida albicans*, 0.625 mg/ml MIC value.

Apricot kernel extract (AKE) effectively suppressed the production of androstenone which was generated by the metabolism of a skin-resident microorganism, *Corynebacterium xerosis* (Someya et al. 2006). Androstenone (5α -androst-16-en-3-one) is a key compound in body malodors, and that female subjects were more sensitive than male subjects to androstenone. (R)-Prunasin and (S)-prunasin, which were nitrile compounds, were isolated and identified as the active constituents in AKE and they strongly suppressed the bacterial metabolism. Amygdalin was not included in the active fraction and it did not have any effect on suppressing androstenone generation.

Testicular Protective Activity

Apricot was found to ameliorate alcohol induced testicular damage in rats (Kurus et al. 2009). Rats given ethanol had severe histopathological changes in seminiferous tubules and germ cells as well as tubular degeneration and atrophy. Sertoli and Leydig cell counts in the interstitial tissue were decreased. Biochemical parameters revealed tissue oxidative stress. Rats given ethanol and apricot diet for 3 months produced similar alterations but to a lesser extent. Rats in the control group, and those fed with apricot diet for 3 months; 6 months and those fed apricot diet for 3 months, and then ethanol + apricot diet for 3 months had no histopathological alterations.

Traditional Medicinal Uses

Apricot fruit is antipyretic, antiseptic, emetic and ophthalmic. The salted fruit is antiinflammatory and antiseptic. It is used medicinally in Vietnam in the treatment of respiratory and digestive diseases. In India, apricot is used in Unani medicine as an anti-diarrhoeic, anti pyretic, emetic, anthelmintic, in liver diseases, piles (Prasad 1999). In Europe, apricots were long considered an aphrodisiac. The seed is analgesic, anthelmintic, antiasthmatic, antispasmodic, antitussive, demulcent, emollient, expectorant, pectoral, sedative and vulnerary In Korea, apricot seed is used for cough, phlegm and common cold. The seed oil lubricates the intestine and produces laxative action. The seed contains amydalin or 'laetrile', a substance that has also been called vitamin B17. This has been spuriously claimed to have a positive effect in the treatment of cancer, but there is refuted by scientific evidence to have no such benefits. The pure substance is almost harmless, but on hydrolysis it yields hydrocyanic acid, a very rapidly acting poison - it should thus be treated with caution. The flowers are tonic, promoting fecundity in women. The inner bark and/or the root are used for treating poisoning. A root decoction is also used to soothe inflamed and irritated skin conditions and also used in the treatment of asthma, coughs, acute or chronic bronchitis and constipation.

Other Uses

Apricot is also used as an ornamental plant. Its flowers provide good foraging for bees producing good honey. Apricots kernels are used in the production of oils, benzaldehyde, cosmetics, active carbon and aroma perfumes. Apricot seed provides an edible, semi-drying oil that has been used for lighting. The oil has a softening and moisturising effect and is used in perfumery and cosmetics, and also in pharmaceuticals. Green and dark greygreen dyes can be obtained from the leaves and fruit respectively. The hard, durable wood has been used for making agricultural implements.

Comments

Hybrids between plums and apricots have been produced recently which are said to be finer fruits than either parent. A "plumcot" is 50% plum, 50% apricot; an "aprium" is 75% apricot, 25% plum; and the most popular hybrid, the "pluot" is 75% plum, 25% apricot, "peachcot" between peach and apricot On 4 November 2011, the Food Standards of Australia New Zealand warned consumers against eating raw apricot kernels following the discovery of high levels of a naturally occurring toxin in some available products that can release hydrocyanic acid in the gut.

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