

THE ORIGIN AND DEVELOPMENT OF VARIETIES

People in prehistoric times gathered fruit from naturally growing trees, planting those they liked best near their homes, and thereby creating the first orchards. The oldest apple remains have been found in Jericho in the Jordan Valley, and in Anatolia. Archaeologists date them to at least 6,500 years ago, but cannot determine if the fruit was wild or cultivated.

Before the expansion of the Roman Empire, Europeans used only an indigenous species of crab apple. But the Romans, and German, Celtic and Slavic tribes took apple trees across the Apennine Peninsula, north to the British Isles, and through the Balkans throughout central and western Europe.

The invention of grafting was the most important milestone in fruit cultivation. The practice was first described in the 3^{rd} century BCE by Theophrastus, a Greek, who is considered the father of botany. Grafting enables the reproduction of a selected plant while preserving its properties and thus the propagation of varieties.

In the Middle Ages, apples were used mainly for cooking and cider. Advanced methods of fruit processing appeared only later. Fruit cultivation was most widespread in monastery and castle gardens, with selection often based on taste. Valvasor wrote that over a hundred varieties were being grown in castle orchards in Carniola. By the 18th century, new apple varieties were being produced through the random selection of seedlings with favourable properties. In the 19th century, the government took a leading role in the economy. Provincial agricultural societies established nurseries and provided educational programmes. By 1889, the Austrian Pomological Society in Vienna, which included Slovene fruit growers, had laid down fruit selections for individual provinces. The final fruit selection for Styria and Carniola was approved in 1910. New market varieties were introduced only after WWII, in the early 1950s. With over 10,000 varieties, the range of varieties grown worldwide is very wide, but through planned breeding, the number of apple cultivars is increasing even more.

For over a decade, Kozjanski Park has been making every effort to preserve the old varieties discovered in its meadow orchards. The projects *Reviving Meadow Orchards, Standard-tree Orchards as an Element of Preserving Biodiversity and Aesthetic Value of Landscape* (under the Interreg IIIA Slovenia/Hungary/Croatia 2004–2006 Neighbourhood Programme), and *From Wryneck to Juice* (part of the IPA Slovenia-Croatia Cross-border Co-operation 2008–2013) have enabled us to preserve old varieties and maintain meadow orchards as high quality habitats. Our Čerček nursery, which will be expanded under the IPA programme, houses some 80 old varieties.

A STORY

Maria Theresa introduced the practice of planting roadside fruit trees as a way of providing food for travellers. At the end of the 18th century, she sought to promote fruit cultivation by ordering newlywed farmers to plant fruit trees upon getting married. Nearly a hundred years later, an article was published in a local newspaper, stating that "/.../ supreme orders have been issued to companies that no-one be granted a wedding certificate until the groom and bride have provided proof to an appointed commission of having planted a prescribed number of grafted seedlings, for in many countries, including our own, this is considered an old, befitting and valuable habit /.../" (Gospodarske novice, 28 June 1856).

VARIETIES

Ananas reneta

Old meadow orchard variety, popular for both its appearance and pleasant aroma. Ripens in late September to early October. Small and rounded, with a typical yellow skin and russet freckles.



Beličnik

Common variety, usually grown near farmhouses. Ripens gradually, starting in July. Used mainly as a dessert apple; not suitable for storage.

Bobovec

The most common variety in Kozjanski Park. A winter cultivar, ripening in October. Undemanding, fruiting biennially, suitable for storage until May. Although often used as a dessert apple, it is mainly made into juice and cider.



Boskopski kosmač

Very large, slightly flattened, but round, with a distinctive russet over most of the apple. Some are flushed with a bright red to redbrownish colour. A quality variety, suitable as a dessert apple and for processing.

Bužlovka

An old variety, sweet, but with a less prominent aroma. It has been preserved because it is the earliest variety, ripening even before the *beličnik* (white transparent). Used as a dessert apple or made into juice and cider.



Carjevič

Easily one of the most popular old varieties. Medium-size, flattened and round apples that ripen in late September. Yellowish-green, with a distinctive dark red flush. Suitable as a dessert apple or for processing; less suitable for transport due to sensitivity to pressure.

Damasonski kosmač

A winter variety, frequently found in meadow orchards, ripens in October. Tiny apples, flattened and round, sometimes totally covered in russeting, occasionally even with reddish freckles.



Dolenjska voščenka

Indigenous Slovenian variety, ripens in October. Medium-sized, flattened and round, with slightly prominent ribs. Turns from green to pale yellow as it ripens, with small lenticels. One of the most tasty domestic cultivars, particularly suitable for people with diabetes.



Ferdekelca

An old variety, preserved only on a few trees, ripens in the summer. Pale green, not very juicy, but sweet, used mainly for cooking. Young trees are particularly lush.



Gloria mundi

Ripens in October, very large apples, slightly flattened and round, with wide ribs. Yellow basic colour, sometimes with orange-brown flush. An average quality apple with weak aroma, but very suitable for cooking due to its taste and consistency.



An old summer variety, begins to ripen in August and is quite common in Kozjansko. Medium-sized apples are slightly flattened and round, with prominent wide ribs. Golden-yellow basic colour, with carmine streaks. Sour taste and pleasant aroma.

Harbertova reneta

An autumn variety, ripens in September, large round apples with prominent wide ribs. Yellow, flushed orange-red. Used as a dessert apple and for processing, not suitable for longer storage.



Jakobšca

The old summer variety which ripens in early August is most appreciated for its sour and aromatic taste. The pale yellow-green basic colour is almost invisible under the dark red flush. Dessert apple, also suitable for processing.



Jonatan

Medium-sized rounded apples with a yellow basic colour and characteristic red flush. Trees are thin and have small canopies. One of the most sensitive old varieties, particularly to powdery mildew.

Kanadka

A winter variety, ripens in late September, popular for its large flattened and round apples. The yellow basic colour is flushed with brownish russet. The excellent sweet-sour tasting cultivar is particularly suitable as a dessert apple as it's flesh is prone to oxidation.

Klanferca

An old variety, preserved only on a few trees. Medium-sized rounded and elongated apples are yellow, partially flushed orange on the sunny side. The flesh is white, rather dry and sweet, suitable for eating and drying.

Krivopecelj

A medium-quality variety with medium-sized elongated apples, ripens in late September. Easily distinguished by its stumpy stalk with a bulb. The basic light yellow colour is covered with dark red stripes. The trees have typically drooping branches.

Kvinten jabka

An average-quality variety, ripens in late October. Medium-sized, flattened and round, with slight ribs in the upper part, yellow basic colour and flushed red. Suitable as a dessert apple, for processing and long storage as it lasts until summer.





London pepping

A very old cultivar, ripens in October, suitable for consumption in December. Very popular for its juiciness and aromatic sweet and sour taste, as well as for its appearance. Apples are medium-sized, slightly flattened and round, yellow and flushed slightly red.



Maunzen

An old variety, rather rare in meadow orchards. Ripens in October, small round apples with prominent ribs. Pale yellow, sometimes entirely flushed red. The flesh is white and juicy, has a pleasant aroma and does not oxidise instantly. Keeps in cellar until summer.

Ontario

An old winter variety, ripens in October, suitable for consumption in December, keeps in cellar until spring. Large apples, flat to rounded, with prominent ribs. Yellow with pale crimson flush. Tasty, sweet and sour, with faint aroma.

Pisani kardinal

An old variety, ripens in late August. Suitable as a dessert apple and for processing. Medium-sized apples, unsymmetrical and with wide prominent ribs. Yellow, flushed orange-red with maroon lenticels. The flesh is juicy, grainy and slightly vinegary.

Prinčevo jabolko

An old variety, ripens in August. Suitable as a dessert apple and for processing. Medium-sized apples, distinctly elongated, yellow with a reddish flush and dark red stripes. The flesh is juicy, with a characteristic pleasant aroma.



Rdeči astrahan

An old variety, preserved only on a few trees, ripens in July. Mediumsized apples are flat to round, and feature prominent ribs. The pale vellow basic colour is covered carmine with a blue hue. The flesh is greenish-white, juicy, grainy, sweet and sour, and has a pleasant aroma. Once harvested it will only keep for two weeks.

Rdeča meglenka

An old variety, preserved only on a few trees, ripens in September. Medium-sized apples, flat to rounded, with slight ribs. Yellow basic colour flushed dark red. Keeps until spring, sensitive to bitter pit.



Rumena lepocvetka

Also known in Kozjansko as rumeni belfer and kutnovka. An old variety, ripens in late September, with distinctive large, slightly elongated and ribbed apples. lemon yellow basic colour flushed orange. A quality cultivar, sweet and sour, with a pleasant aroma.

Rdeči jesenski kalvil

An autumn variety, ripens in early October, with distinctive round apples with prominent ribs. The basic colour is almost always hidden under a flush of red. The flesh is white, with a reddish hue just under the skin. Mainly used as a dessert apple. When processed, it vields reddish juice.

Rdeča škrbotavka

The old variety which ripens in August is also known as *štrudlovka* or vinšča. medium-sized, elongated apples are greenish yellow, flushed red with maroon stripes. It is appreciated for its gradual ripening during the whole month, pleasant aroma, sour taste and juicy and crisp flesh.







Rdeča zvezdasta reneta

Ripens in late September to early October, keeps in cellar until spring. Medium-sized apples, flattened and round. The basic yellow colour is almost entirely flushed red. Few lenticels around the stalk, more around the bottom.



Šampanjska reneta

An old variety, preserved only on a few trees, ripens in October. Medium-sized to small apples flat to round, with prominent ribs. The basic yellow colour can be flushed orange. Sour and not very aromatic. Keeps in cellar until spring.



An old Russian variety, preserved only on a few trees. Large, round apples are greenish-yellow and covered with red stripes. Mainly used fresh, for processing and drying. Particularly suitable for transport.



Špička

An old variety, ripens in August. Small to tiny apples are rounded at the top and nearly pointed at the bottom. Slightly ribbed, the basic colour is yellow. The flesh is white, with a green hue, sour, grainy, and juicy.

Štajerski mošancelj

The old variety, which ripens in October, is particularly appreciated as a dessert apple, for processing and storage. It is also known as *winter mošancelj*. Tiny, flattened and round apples are golden yellow, sometimes slightly flushed orange. The flesh is yellowish, compact and juicy, the taste is slightly vinegary, but pleasant.



Štajerski pogačar

The old variety, which is quite common in meadow orchards and ripens in October, is also known as *kisli barivc* and *božičnica*. Large apples are flattened and round, with a greenish-yellow basic colour, crimson flush and long stripes. Almost insensitive to pressure, it is very suitable for storage.

Štupanka

A common variety in Kozjanski Park, similar to *ovčji nos*. It ripens in late September and early October and can be used immediately. The distinctive round to elongated apples have a light red flush. The flesh is pale yellow, very juicy, and has a pleasant aroma.

Zlata parmena

The old variety, which is very common in Kozjanski Park, ripens in September and is particularly appreciated for its aroma. Some call it *zlatorumenka*. Medium-sized to small apples are flat to round, golden yellow, flushed orange-red and covered with stripes.







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