

Apples: Some History and Identification

Find sweet success in harvesting your orchard and discover how to identify individual apples from many varieties

Many thousands of different apple varieties have been bred over the millennia, so it's no surprise if we often don't know which ones we're growing, when we should harvest them and how we should store our crop.

All our domestic apples can probably be traced back to the ancient apple forests in Kazakhstan, in the foothills of the Tien Shan Mountains. There a nonagenarian botanist, Aimak Dzangaliev, has devoted his life to cataloguing all the forests' wild apples, with their astounding range of colour, shape and fragrance. He's identified 56 varieties of *Malus sieversii* and believes that 20 of these are the basic, original ecotypes, while the remaining 36 were developed from them in the distant past. There's nothing new in plant breeding!

Visitors to these wild apple forests, some of which are protected by the Kazakhstan government, have been captivated by their richness and diversity. The red, pink and creamy yellow apples caught the attention of the famous Russian botanist, Nikolai Vavilov in 1929, who wrote that the forest was: "a marvellous garden where apples and pears look down on you from the trees and beg to be eaten.... I could see with my own eyes that I had stumbled upon the centre of origin for the apple." It was his enthusiasm that then fired his guide, the 15 year old Dzangaliev, to study in Leningrad under the Russian before devoting the rest of his life to researching and protecting his native fruit forests.

Even though Dzangaliev makes a point of eating several apples a day, much of the harvest falls to the ground and, while steadily decomposing, provides a wondrous feast for the forest's inhabitants. A fate we want to avoid for our own, much smaller crop. If we know a tree's variety and rough harvest date, there are no problems, but many of us have inherited some trees and don't know what they are, or bought them years ago, and lost the labels or have simply forgotten. Unfortunately, it's a very skilled job identifying an apple, especially as one tree may produce different-looking fruits, and soil conditions and the strength of the summer sun can radically affect appearance.

Correct identification has proved quite a challenge to the experts for centuries. Jean Bauhin from Switzerland was one of the earliest to have a stab at it by publishing line drawings with brief descriptions in 1598, but it wasn't till 1804, when the London Horticultural Society was established, that systematic cataloguing began.

When trying to identify a variety, the first three questions are: whether it's a cooker or eater; when it's ready to harvest; and how long to keep it before eating. We can all easily answer these ones – one bite will tell you whether it's for the pan or the plate. And when the first few apples begin to drop, you'll know the rest will be ready to harvest over the next couple of weeks. It's great fun having a leisurely stroll round the orchard, checking out the crop! Some apples will be ready to eat immediately, most after a week or two, but others, especially later ones, may need to be kept in store for a few weeks before eating. Until you know how long to store, try every week to find out.

After answering these three questions, and that might be all you want to do, precise identification becomes a bit more tricky. Experts look at colour, size, shape, what the 'eye' [the withered remains of the sepals or flower], the 'basin' [the area round the eye] and the stalk look like. They then move on to taste, colour and texture of the flesh. Daunted? Like me, you

probably are, and you could send a specimen to the National Collection at Brogdale. You will need to choose 3 apples from different parts of the tree and the experts there will do their best for you. Visit <http://www.brogdalecollections.co.uk/brogdale-identification.html> for details on how to do this.

Storing apples

If you have space to grow several apple trees, they'll probably ripen at different times so, except in bumper years, you won't have much fruit to store. But with surpluses, correct picking is essential. Once the fruit is ripe and the pips have turned brown, start checking individual apples – luckily they won't all come at the same time from a tree. Harvest ones that come away easily in your hand. Hold the fruit in your palm and lift gently, giving the apple a slight twist. Eat any that are bruised or in any way damaged and only store healthy, clean, unbruised ones.

Store in a cupboard, provided the temperature doesn't get higher than 10°C, or in a frost-free shed. Wooden, slatted, vegetable boxes that stack on top of each other are ideal, as the fruit isn't crushed and there's good air circulation. Or you could put the fruit in plastic bags and lay on shelves. By leaving the top of the bags slightly open, you let air in and keep the apples moist. This stops them shrivelling and drying out. Alternatively, seal the bags and make small holes in the plastic. The fruit should keep at least till Christmas.

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