

## DO ONE THING – Make a Garden Grow

### Background information on the seeds for your school grounds.

#### **Borage** *Borago officinalis*

Borage is a tall, strong plant that grows wild in Southern Europe. It was probably brought into Britain by the Romans.

The star-shaped brilliant blue flowers were said by an Elizabethan herbalist to “drive away sorrows”. They look really very pretty when sprinkled over salads and floating in summer drinks. They can even be frozen into ice cubes. In fact the flowers and leaves contain sticky juices (mucilage) that actually make drinks seem cooler! Only the very young velvety leaves are used in cooking: they have a taste similar to cucumbers. Older leaves become tough and covered with bristly hairs.

Borage has been used in herbal medicines for centuries and can be used to treat colds, fevers, and breathing problems. The leaves contain up to 30% mucilage as well as many other useful vitamins and minerals such as manganese. The leaves are said to ease painful swellings. Freshly pressed juice from the plant is supposed to reduce tiredness in the spring and act as a general ‘pick me up’. According to an old English saying, which can be traced back to the famous Roman author Pliny, “Borage gives Courage”.

#### **Cornflower** *Centaurea cyanus*

Cornflowers used to grow in their thousands amongst the corn fields (fields of cereals such as wheat and rye). Each plant only lasts for one year, but produces thousands of tiny seeds. The plant is also known as “bluebottle” because of the brilliant blue colour of its flowers. However the tough stems blunted the farmers sickles as they cut the corn in olden times, and for this reason it was also named “Hurtsickle”.

Today the cornflower is a rare plant in the wild. This is because since the 1920s the seed-corn that farmers use to sow their fields each year has been cleaned of all the wild weed seeds such as cornflowers. Now this beautiful plant is often included in wildflower seed mixes.

Beware! Cornflower can become a problem weed or “invasive plant” if introduced into areas where it has never grown in the wild. It grows naturally in Asia and Europe. However in North America and Australia it should not be sown close to natural grasslands and prairies. In these places it can spread quickly and is then difficult to control without using weed killers which may kill rare plants.

Cornflowers are grown for florists because the flower heads retain their colour and are long-lasting. It is also a popular garden plant. Garden varieties include attractive pastel shades ranging from blue to mauve.

The Cornflower petals are edible and can be used to decorate food or to turn drinks blue. The juice of the flower mixed with alum can even be used in watercolour painting. It is also mentioned as a cure for scorpion poisoning!

### **Common Poppy** *Papaver rhoeas*

Did you know that a poppy plant can produce 17,000 seeds in its one year of life? These tiny seeds can survive in soil for at least forty years. If the ground is dug over or disturbed they may germinate in their thousands to create a vivid splash of red. The poppy has therefore followed the spread of agriculture around the world. Poppy seed was found amongst grass and barley seed in ancient Egyptian remains dating to 2500 BC. The poppy was the sacred plant of "Ceres", the Roman Goddess of crops. The Romans used to decorate her statues with garlands made of woven poppies and barley.

Why do we have "Poppy Day" to remember the soldiers who have died in wars? A soldier in the WW1 was inspired by the red poppies that sprang up in the battlefields and he wrote a very beautiful poem "On Flanders Field" which became famous. In the summer after the end of WW1, a war artist revisiting the site of the Battle of the Somme was also amazed to see the battlefield and trenches transformed by the carpets of red poppies. These were seen amongst white daisies, blue cornflowers and clouds of white fluttering butterflies. The poppy was therefore chosen by the British Legion in 1921 to remember the end of the First World War and the poppy tradition has continued.

Have you heard of the custom of making poppy dolls? Flower buds can be carefully opened to uncover beautifully folded silk-like petals. Once you bend the petals down to reveal the hairy black head, the petal skirt is kept in place by tying round a piece of fine grass to make a belt! A bright red ink can be made by soaking the petals in a small amount of hot water and alcohol (parents' permission!). When ripe, the seed-head shakes in the wind to fling out and scatter the tiny seeds like a pepper pot. Poppy seed is edible and in many parts of the world is used to decorate bread rolls, cakes and biscuits. It can also be mixed with honey to make salad dressings.

Seeds from a larger species of poppy called the opium poppy *Papaver somniferum* have a spicy taste and are used as an alternative to nuts and mixed spices in curries. Its ripe seeds contain 30% oil as well as useful minerals which stimulate the appetite. However, harmful chemicals called alkaloids which are raw materials for drugs such as opium are found in the capsules and unripe seeds. These chemicals are not found in European varieties

### **Pot Marigold** *Calendula officinalis*

The Pot Marigold has been grown in gardens for centuries because of its attractive bright orange flowers. It also has several uses. The flower petals give flavour and colour to rice, salads, cakes and puddings. An orange-coloured liquid, tasting similar to a much more expensive spice called saffron, can be made by gently simmering the petals. This is then used to add a special flavour and colour to food. Dried petals can be used to make a herb tea. The leaves are a little bitter and salty but can be added to salads.

The liquid made from soaking flower petals of pot marigold is supposed to lighten blonde hair and keep it in good condition. It is no surprise that it can also be used as a natural dye to colour wool yellow.

The pot marigold is also known for its healing powers and by mixing the petals with oils, an ointment can be made to clear the skin of old wounds and scratches. The best known use today for pot marigold is probably in the preparation of the herbal cream which is known by the plant's Latin name "calendula". It is used to treat sore and rough skin.

### **Sunflower** *Helianthus* species

The enormous nodding head of the bright yellow sunflower is certain to bring some sunshine into your day and for the painter Vincent Van Gogh the flowers were an inspiration for some of his most famous paintings. This tall plant can also have other creative uses in the garden. One idea is to plant the sunflowers to form the major supports of a den by and growing climbers (perhaps runner beans or sweet peas) to scramble up and fill in the gaps and create a roof. Remember that the plant only lasts one year. The challenge in schools and villages to grow the tallest sunflower is always fun and is also good measuring practice.

The sunflower is also a valuable plant. The seeds are very good to eat and contain Vitamin E and a chemical called linoleic acid which helps to reduce cholesterol. It is a frequent ingredient in breakfast cereals and snack bars as well as a topping for breads and salads. You can save your own sunflower seeds by cutting the seed head when the petals have fallen off and then hanging it upside down by the stem in a warm dry room. Take time to admire the orderly arrangement of seeds in the heavy seed head before rubbing your hands across it and collecting the seeds as they fall out.

The seeds also make very good bird-food or can be kept to sow in the following year.

Sunflowers are grown by farmers for the valuable seeds which are added to animal feed and also as a source of oil. Sunflower oil has a pleasant flavour and is one of the best all-purpose oils. It is suitable for frying, for making salad dressings and can be used to make margarine.