Grasse, France

BE CAREFUL!
To the best of our knowledge the plants mentioned here are not known to be toxic but we cannot guarantee you will not have an allergic reaction. So avoid putting your fingers in your mouth, nostril or eyes until you have washed your hands.

In the Mediterranean section, notice how fragrant the plants are here, especially lavender and rosemary. Plants are scented for different reasons - perfumed flowers attract pollinating insects whilst smelly leaves deter hungry animals & insects. Plant smells and flavours exist because of the presence of essential oils - during hot, still summer days, plants keep cool by evaporating these oils instead of water.

Look for *Lavendula x christiana* (**8**) and rub its silvery leaves. Do you think it smells different from shop bought lavender? A hundred years ago a nasty accident led to a fascinating discovery. In the southern French town of Grasse, chemist René-Maurice Gattefossé set his arm on fire. He thrust it into the nearest cold liquid he could find - a vat of lavender oil. He immediately noticed the pain relief was greater than previous burns he'd suffered. Later he happily observed how the wound healed remarkably quickly with little discomfort or scarring. He coined the term aromatherapy to describe this phenomenon. And so this alternative medicine, that uses essential oils, was born.

It might surprise you that rosemary *Rosmarinus officinalis* (**9**) is linked to the famous perfumed water, Eau de Cologne. When plant material is boiled in the process of distillation, both essential oils and water are driven off. When the vapour is condensed the valuable essential oil is extracted leaving finely perfumed water. Invented in the 18th century the aroma of Eau de Cologne comes from a mixture of rosemary and citrus plants distilled together.

There are 1000 different plant species in the Great Glasshouse – keep sniffing the air and rubbing leaves to discover new sensory pleasures.

GROWING THE FUTURE
TYFU'R DYFODOL

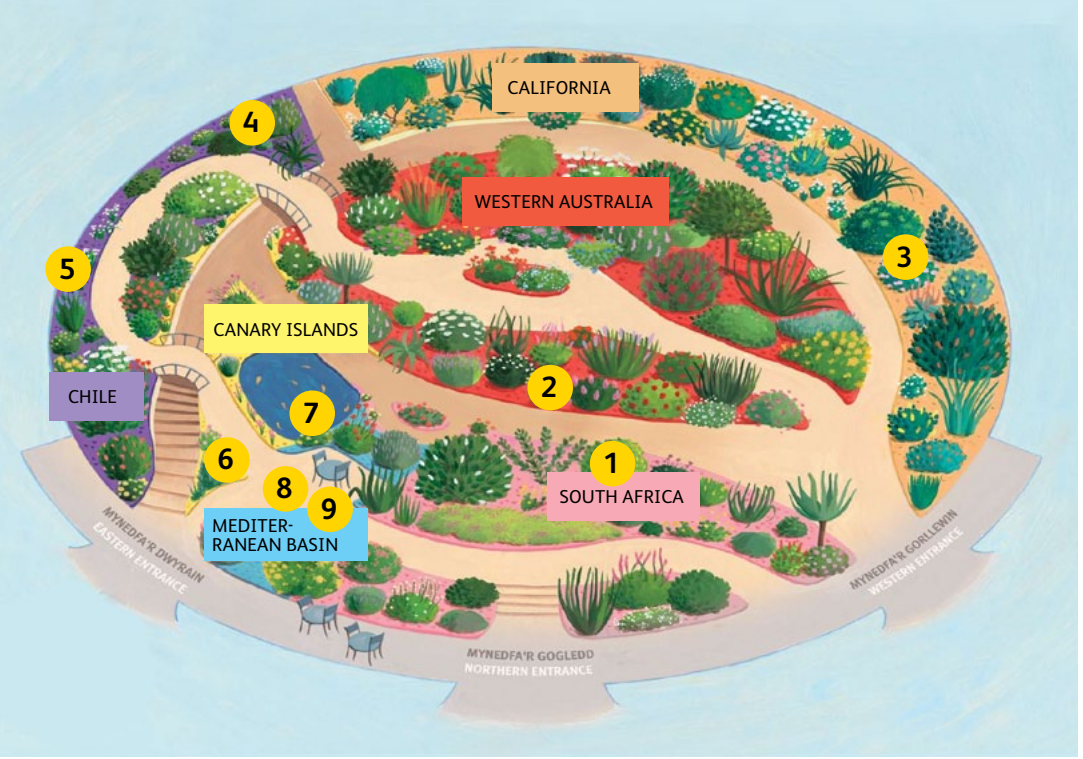
Llywodraeth Cymru
Welsh Government

Growing the Future at the National Botanic Garden of Wales is part of the Welsh Government Rural Communities-Rural Development Programme 2014-2020, which is funded by the Welsh Government and the European Union.

FREE

Sensory Trail

Touch and smell some of the most sensual plants on Earth.
They originate in places around the world which have a Mediterranean climate of moist, cool winters and hot, dry summers. Only 1.7% of the Earth's surface has this type of climate, yet it is home to over 20% of all known flowering plant species. It occurs on western coasts of Australia, South Africa, Chile, California and across the Mediterranean Basin.



Follow the numbers on the map and look for the yellow dots on plant labels.

Start the tour with a surprisingly soft shrub. From the main Western entrance of the Great Glasshouse, go down the slope on your left. On the South African Cape peninsula *Phylica pubescens* (**1** - cover photo) might be known as featherhead by English speakers but here we call it 'fluffy' because it's one of the fluffiest shrubs you'll ever touch. Sunlight highlights the foliage too, and its visual properties make it popular with flower arrangers. Go on, have a feel.

In Australia, gently rub the soft stems of red boronia *Boronia heterophylla* (**2**) to release its strong scent. In spring you can see its delicate flowers which have their own lighter aroma. Used by flower arrangers it is grown for its citrus-flavoured essential oil which is used in the drink and food industry.

Californian sagebrush

Cistus in Majorca

The origin of the word 'perfume' comes from the ancient practice of burning fragrant woods. Some Native America tribes bundled together dried aromatic herbs, like the Californian sagebrush *Artemisia californica* (**3**), and let them smoulder to enhance rituals and healing. Rub the leaf. What does the smell remind you of?

In Chile, have a quick rub of silver ragwort *Senecio cineraria* (**4**)– it's as soft as a lamb's ear. Then sniff the air. Does the smell here remind you of anything? Most people think it smells of curry. Curiously, it comes from the decaying fallen leaves of the ñipa tree, *Escallonia illinita* (**5**). Other parts of the living tree are rich in sweet smelling resin which has been extracted for use in perfumes.

Perhaps the most aromatic plant in the Great Glasshouse is Canary whin *Teline stenopetala* (**6**). Its sweet, light scent can fill the whole Glasshouse for a few glorious days in springtime.

Opposite the Canary whin, look for Montpelier cistus *Cistus monspeliensis* (**7**). Feel how sticky it is. Cistus shrubs like this can cover whole hillsides around the Mediterranean Sea. Their stem and leaves exude a sticky resin called labdanum which has a rich, long-lasting 'musky' aroma. It's the main ingredient to make the scent of amber in perfumery and is now used to flavour 'tobacco' flavoured e- cigarettes.