Talking Point with... SHENAGH HUME

Being close to nature is beneficial to all, but it needs to be as safe an environment as possible in all respects – including allergy, writes **Shenagh Hume**



Shenagh Hume is a nurse specialising in allergy and asthma. Recently qualified with a Diploma in garden design from Capel Manor, she now combines knowledge of allergy and planting to help people affected by pollen.

AS A SPECIALIST allergy nurse and newly qualified

garden designer, I am interested in planting for health and wellbeing. However, I have come to realise that simply following the principle of 'right plant, right place' may not be appropriate for everyone who uses the garden. In particular, the design practice of repeating certain plants, grasses and trees may be contributing to the increase in allergic diseases, especially when a limited palette of species is chosen. Is it possible that fashion in garden design has a direct influence on the exponential increase of

pollen-induced human disorders?

Consider the birch tree, frequently used in contemporary landscape design. It looks stunning in large groups but the trees produce the most potent and troublesome pollen. When inhaled, it can trigger a number of diseases including hay fever, asthma and 'birch oral allergy syndrome' – a condition linked with food allergy. The prevalence of diagnosed hay fever has trebled over the last three decades (Gupta 2007) and currently 50% of children under 18 in the UK have one or more allergies (Allergy UK).

Frequent exposure to the same allergen has consequences and can cause allergic disease to develop in the susceptible, particularly if it runs in the family. A person with one allergy is more likely to develop another. For example, a child with eczema is more likely to develop hay fever, asthma or both – a phenomenon known as 'the allergic march'. Symptoms, ranging from mildly irritating to severe, can and do affect that child's quality of life, resulting in days off school. Research shows that teenagers with hay fever are more likely to drop a grade in their GCSEs compared with non-allergic peers. The main principle of treating allergies is to advise avoidance; but avoiding pollens by staying indoors is not an option.

There will always be pollens in the air but the closer you get to them ('local proximity') the greater the effect. Pollen is tough, can take years to decay and can accumulate, especially in enclosed areas. Planting a shrub by a front door can fill the house with pollen every time the door is opened. Out in the garden, imagine a child kicking a ball into a bed of ornamental grasses or a hedge full of pollen that has fallen from the birch tree above: clouds of invisible pollen will become airborne, landing on the child and become inhaled. Once attached to the child's clothes and hair, it will continue to affect them long after that initial exposure. It is, therefore, worth reducing pollen levels, particularly in spaces enclosed with high wall boundaries. Substituting a tried and trusted planting palette with low pollen alternatives when necessary will significantly reduce exposure and, in turn, help prevent symptoms.

What ensures a feelgood factor in people is often conducive to wildlife. It is popular opinion that flowers trigger hay fever and asthma. The good news is that, for the most part, this is a myth. Flower pollen is too heavy and sticky to become airborne easily. There is a huge choice of low allergy flowering plants for all seasons that attract bees and other beneficial garden insects. Having an allergy to pollen does not increase the risk of bee or wasp allergy, so unless a doctor has diagnosed

"FREQUENT EXPOSURE TO THE SAME ALLERGEN HAS CONSEQUENCES AND CAN CAUSE ALLERGIC DISEASE TO DEVELOP IN THE SUSCEPTIBLE"

this in a patient there is no need to exclude flowers from their environment. However, strongly perfumed flowers affect some people and should be avoided.

What can we do as garden designers to address the problem of pollen pollution? Science-based information is available. Allergy specialists Paloma Cariňanos and Manuel Casares-Porcel have analysed how multiple factors in the planning and planting of urban spaces have contributed to the increase in pollen allergy. Results are published in the Journal of Landscape and Urban Planning 101 (2011) 205-214. Their recommendations for designing with low allergy impact apply to any size of project: • Avoid massive use of male

- dioecious species
- Increase plant biodiversity
- Choose species with low to moderate pollen pollution
- Avoid forming large focal pollen sources and screens
- Obtain expert advice when selecting suitable species.

Plant selection is critical to creating a healthy garden and books are available to help us. Thomas Leo Ogren, who has a master's degree in agricultural science, has created the Ogren Plant Allergy Scale (OPALS), the first plant-allergy ranking system used by the USA Department of Agriculture. OPALS rates plants 1-10 with '1' lowest in allergy and '10' highest. His book *The Allergy-Fighting Garden* contains an A-Z listing of plants with their rankings. Lucy Huntington's book *Creating Low-Allergen Garden* has comprehensive details on all allergies in the garden.

There are many factors to consider, but it's about prioritising, customising, and – ultimately – judicious planting. Designing low allergen gardens need not be dull. Asking clients about allergies such as hay fever or asthma should be standard procedure during a design consultation. It's all about the right plant, in the right pace, for the right person. O gardendesignadviser@gmail.com