## **Pollution horticulture**

Art & Culture



A major challenge to the horticulture industry ispollutionand the negative effects that may arise because of it. As the population grows it is apparent that pollution is unavoidable to some degree, this will undoubtedly have a impact on commercial horticulture. There are three main types of pollution that can have a negative effect on horticulture; Air pollutionwater pollutionsoil pollution he first challenge that commercial horticulture faces due to pollution is not pollution itself but a separate issue that has arisen because of it, the necessity to reduce it.

Due to this laws are being passed such as;

TheFoodandEnvironmentProtection Act 1985 (FEPA) and The Control of Pesticides Regulations 1986 (COPR). (Healthand Safety executive, 2009). These acts both affect how plants are grown regarding the use of pesticides, herbicides, chemical fertilizers and other chemicals used widely within the industry. these acts are being implicated to reduce the amount of pollution created by such chemicals. Some people believe that the use of these chemicals may lead to polluted soil which can also promote polluted water, this happens when rain water runs off soil that is polluted into rivers, reservoir and other water supplies(Bollage and Bollag, 2010). This is known as leaching(Hester, R. E and Harrison, R.

M, 1996). The disadvantage of not using chemicals is that more organic methods are being used. whilst organically grown fruit and vegetables for instance are seen to be a healthier option by many(Fleming, 2007). it does make their production more expensive. For example a crop grown using organic methods rather than using herbicides will require weeding by hand, bringing up the cost of labour. This is also a financial risk to the industry especially with the current economic climate(Hale, 2010). Organically grown plants are less guaranteed having a yield of 10-20% less on average than non organically grown(Leifert, 2010).

another effect of pollution isclimate change(Houghton, 2010). This undoubtedly will challenge commercial horticulture in a number of ways, firstly it will have a impact on irrigation(Jerry Knox et al, 2007). As the temperature in the UK rises due to climate change by an estimated 1-5°C annually by the end of the century more water will be needed to satisfy plant needs(Jerry Knox et al, 2007). However with higher temperatures comes drought meaning less water will be available. This will increase the cost of irrigation and also threaten the survival of many plants. Climate change may also effect what plants are able to grow in the UK, consideration will be needed, if a plant is placed but does not grow it is the landscaper of horticulturistsresponsibility(Lavelle, 2009). This table shows how the climate in London has changed since 1950; Year | Min Temperature°C | Max Temperature°C | 1950 | 21.

9 | 1. 7 | | 1960 | 22. 1 | 1. 6 | | 1970 | 23. 6 | 0. 7 | | 1980 | 21. |-0.

1 || 1990 | 26 | 2. 5 || 2000 | 23. 2 | 2. 4 || 2010 | 25 |-0. 3 | Source: Met office (2010) Pollution is a challenge that is unavoidable to the industry, however with orward planing to combat the effects! believethe industry will be able to flourish and grow as more people look to greener spaces in a time of higher population and with a need to escape pollution.