

HYDROCULTURE – ENVIRONMENT AND WASTE DISPOSAL

PLANT PROPAGATION:

In general, the basis for cultivating subtropical plants in hydroculture is propagation from seed and via cuttings. As these plants are not taken from the wild and are produced in nurseries in the plant production cycle, the impact on the environment is minimal. In rare cases in the past, there were problems in the retail trade with *Beaucarnea recurvata* (elephant's foot) from wild stocks, due to unscrupulous trading. However, the threat to natural stocks of *Beaucarnea* was recognised in time and has now been controlled to the extent that large wild plants have disappeared from the market. This successful regulation is to be welcomed, and the *Beaucarnea* plants commercially available now are almost entirely propagated from existing stock.

PLANT PROTECTION IN PRODUCTION:

When propagating plants, a number of pests can emerge, which must be combatted using so-called beneficial insects or pesticides. Plant protection measures are currently legally regulated to the extent that production in European nurseries meets the world's highest environmental standards.

Consumer plant care and protection:

In order to meet the specific responsibility of protecting plants indoors, systemic or biological methods should be used in interior landscaping.

For ornamental plants, systemic substances are introduced with the irrigation water or, in the case of hydroculture, added via the shaft of the water level indicator. The active agent is then taken up by the plant and reliably kills pests as they suck the plant cell sap. The plant must be sufficiently healthy so that it can take up the active agent.

In terms of biological agents, the company Neudorff, for example, has developed a whole product range of natural pesticides, which are completely safe to use. It is generally recommended that even natural care products are applied only in water-bound form with a pump sprayer, as is common in horticulture. The use of spray cans is prohibited for professional users, as the resulting aerosols, even from completely safe substances such as leaf shine spray etc., could lead to respiratory irritation, even if the legal requirements for application indoors are met here.

Waste disposal:

Hydroculture plants can simply be disposed of in the organic waste collection bin or compost. However, to do this the plant should first be removed from the planter and the culture pot (plastic) should also be cut away and disposed of separately. Minimal amounts of expanded clay adhering to the roots of plants being disposed of are not classed as contaminants; small quantities of gravel and sand are generally allowed in the composting facility.

Large amounts of expanded clay should be disposed of separately as construction waste and will then be used as bulking material in road construction, etc. Cleaned expanded clay can also be mixed with cement, as a basis or aggregate material in the creation of lightweight concrete, among other things. As expanded clay is a pure, natural product, there are numerous possibilities. Used, cleaned expanded clay is also very well suited to use as a drainage layer for soil-grown plants as well as in garden and path construction and as an aggregate to loosen soils, so consumers themselves can reuse expanded clay too.

Hydroculture planters are generally made of non-mixed plastics, such as PE or PU, or metals such as aluminium or stainless steel, making them valuable raw materials, which should be recycled rather than disposed of. The robust, high-quality planters can also be refreshed with a coat of paint or reused for new planting.

If you have any questions, please contact us at: www.hydro-klein@email.de