

# Issues for ENA working group „sustainability in the nursery sector“



## Introduction

**Our world is in transition: climatic conditions are changing. At the same time, people are taking care to consume fewer resources than in the past.**

Society is also taking a closer look at environmental conditions. This is right and important. After all, we must actively protect and shape the basis of our existence today in order to ensure the well-being of people and nature in the future.

The tree nurseries in Europe are important stakeholders in this process. After all, the woody plants we cultivate form the basis for natural climate protection and for green cities and landscapes worth living in. What could be more sustainable than a plant that blossoms and grows in the right place?

The production of woody plants in the tree nurseries also takes place at a high quality level. This quality guarantees optimum plant growth and at the same time protects the environment and conserves natural resources. The industry is committed to the UN Sustainable Development Goals.

To help politicians and society better understand the sustainable principles and ideas on which production is based and what is needed to grow plants for a better world, we would like to identify and explain ten sustainability topics below.

## Reduction of peat

**The use of peat has been significantly reduced in recent years. Together with research, we continue to achieve continuous improvements. However, certain amounts of peat may be necessary to cultivate vigorous woody plants that are long-lived and beneficial to people and the environment.**

Growth-promoting and plant-stabilizing substrates are necessary to cultivate plants in pots. Plants in pots are mainly used in private sales. In garden centers and DIY stores, potted plants are the standard for plant sales.

The substrates used are a mix of different ingredients. Peat is an important one. Its properties are of paramount importance: its structural strength, high water storage capacity and constant PH value guarantee sustainable plant growth.

For years, nurseries have been reducing peat in substrates and replacing it with other substances. However, these substitutes must offer guarantees that the plants will grow to the customer's satisfaction. They must also be available in sufficient quantities, affordable and environmentally friendly. Peat is a clean medium. In the case of substitutes (such as compost), it must also be ensured that they do not destroy the plants with diseases and pests. Special attention must be paid to the risk of introducing foreign pests when importing substitutes.

In the meantime, the share of peat substitutes has reached up to 25%. This development will

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continue in the coming years. However, completely dispensing with peat is not conceivable at the moment.

## Responsible use of plant protection products

**In an ongoing process, nurseries are reducing the use of chemical pesticides, optimizing their use and working with research and industry to find alternative ways of ensuring plant health. Realistic reduction targets at EU level are supported by the sector. Bans must always be rejected where these lead to the fact that plant health cannot be guaranteed in accordance with the EU Plant Health Regulation.**

The nursery sector cannot be compared with the other areas of agriculture in the field of chemical plant protection because of this legal provision, but also because of the large variety of assortments. Therefore, legally defined so-called sensitive areas, in which only reduced or no integrated plant protection is possible, must remain the exception. Otherwise, the nursery sector requires exceptional permits in the sensitive areas.

Healthy plants are the condition for healthy natural and urban spaces. The European Union has therefore created regulations to ensure plant health on the European continent (EU Plant Health Regulation). Only healthy plants may be sold and shipped within the EU on the basis of

this regulation. And only healthy plants therefore receive the authorities' „travel document“, the EU plant passport.

The basis for plants that are free of pests and diseases is good professional practice in Europe's nurseries.

The diverse crops in nursery fields require different ways to ensure plant health. Young plants are also particularly impaired in growth when fast-growing weeds deprive them of nutrients or water. Nurserymen are professionally trained and can therefore responsibly pursue the goal of officially prescribed plant health. This includes prevention, early detection, acute treatment and destruction of infested plants. Mechanical, thermal, digital, natural and synthetic methods or agents are used. This is always environmentally friendly, sustainable and economical.

## Relevance of alien species

**Climate change is also changing our vegetation. The nurseries are keeping a very close eye on how the growing conditions for woody plants in Europe are developing. Together with researchers, they are responsibly identifying new woody species and varieties to complement the native woody plant assortments. In doing so, the nurseries take into account not only climatic conditions, but also biodiversity. In this way, the nurseries safeguard the flora and fauna in the Europe of climate change.**

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Dead trees in our cities and forests show it: climate change is affecting our native flora. The appearance of pests from other parts of the world, which find new habitats and host plants due to warmer temperatures, but also due to global trade routes, are also damaging our native woody plants.

When climate change and foreign pests make some native plant species impossible to propagate or unable to grow in their place of use, gaps appear in the plant users' assortment. Together with researchers from all over Europe, nurseries are therefore further developing their assortments in order to secure and strengthen the green infrastructure in the face of climate change on our continent. This is not only about site equity, but also about preserving biodiversity in the countries of Europe.

Due to global trade chains and climate change, there is a constant risk of diseases and pests being imported. Our sector must be able to react quickly to such cases. This also includes the availability of pesticides.

Nurseries and researchers are taking great care to select non-native plants so that they do not become invasive and displace native species.

Invasive alien pests and diseases are prevented in the nurseries by consistent prevention and protection measures (quarantine) or they are destroyed. This is done in close consultation with the plant protection authorities of the EU and the

member states.

### Further development of digitalisation and robotic

**With the help of research, it is becoming increasingly possible to integrate digitalization and robotics into the work of nurseries. In the future, artificial intelligence can also facilitate work on the farms if the sector receives support as a field of research.**

By using these new processes and tools, it will be possible to produce plants even more efficiently and with fewer resources than before. Diseases and pests can be identified more quickly and combated with targeted use of crop protection products. The soil can also be treated more gently.

Much has already been achieved so far. With GPS, planting can be done more rationally and efficiently, but also the use of self-driving machines, e.g. for weed control, can be made possible.

The application of pesticides can be more precisely targeted with sensor technology. Drones and photosensors can be used to detect pests and diseases at an early stage, enabling preventive intervention to maintain plant health. However, this process is only just beginning and must be further supported and broadened through research and investment.

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## Dealing with water

**Water is the most important resource in nurseries. In view of climate change, nurseries are being particularly careful with water. Because one thing is certain: no woody plant will grow without water. In the worst case, it will die.**

Due to the change in precipitation over the course of the year, there are longer periods without rain or even drought, especially in the summer months.

It is existential for nursery plants to be supplied with water even during these periods. The sector is aware that there will be increasing competition from a wide variety of water users. Responsible to other water users and to the environment, nurseries are adapting to this situation.

In recent years, the nurseries have developed comprehensive measures for the economical use of water. Ground irrigation via drip hoses is just as much a part of this as rain retention through large ponds.

In pot plant production in particular, water cycles already exist in many cases that reuse used water. This requires a high level of quality in terms of water treatment. Nutrients must be reduced to the necessary minimum and infiltration into the grown soil and groundwater must be prevented. However, it is also necessary to identify and eliminate pests in recycled water so as not to spread plant diseases through recycled water.

Potted crops should be eligible for premiums under the Common Agricultural Policy (CAP) in the future, given this particularly sustainable characteristic.

Climate change is also being addressed through a change in product range. In many cases, drought-resistant plants are being cultivated. This is also of great importance in relation to the subsequent location of use, as plant users also have less water available.

## Nature Restoration Law and its perspectives

**The Nature Restoration Law assigns a key position to nurseries. In particular, the EU's goal of cooling cities in climate change by covering them with woody plants requires a high demand for produced plants that can withstand climate change and at the same time fulfill their tasks for people and the environment at the place of use.**

This requires positive production conditions. This includes having enough land to cultivate woody plants in nurseries. Competition for land for regenerative energies (wind, solar, corn, etc.) with simultaneous set-aside of agricultural land for nature conservation is already high today. Tightening up the legal regulations in this area must not result in land being taken away from nurseries. It must also remain possible for them to provide professional plant protection.

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In sensitive areas where this is not permitted or only permitted to a limited extent, the nursery sector needs an exception to this.

## Soil regulation and the importance for nurseries

**The nurseries protect the soil. Soils are covered with interseeding wherever possible between crops, which promotes biodiversity as well as harbors beneficial insects and prevents erosion.**

Interseeding is also standard good agricultural practice to ensure and increase soil fertility. Desiccation and erosion are thus prevented.

The woody plant ready for sale or transplanting naturally has a root ball. The roots are surrounded by soil. This is necessary to transport the plant to its place of use undamaged. The losses of the soil are regularly replenished with soil.

Therefore, production-related handling of soil must continue to be permitted without restriction in the future for the benefit of the plants and in the sense of plant use.

## Reduction of plastics

**The nurseries product is particularly sustainable. Plastic is largely dispensed with in the use of auxiliary materials in production. However, customers on the one**

**hand and the long production period of woody plants on the other partly require the use of plastics. Here, full use is made of recycling.**

Pots in production must be durable, as the plants remain in them for a long time. Therefore, organic containers are usually ruled out as plant containers. However, a high recycling rate exists for pots. Containers are usually produced from recycled materials.

Further repackaging, for example foil around the transport container or the plant itself, is due to the requirements of the transport industry and the retail trade in order to get the plant deliveries to the point of sale undamaged.

## CO2 footprint and compensation

**The product of the nurseries is a living carbon reservoir. The nurseries therefore promote the carbon neutrality of the continent every day.**

Tree nurseries are the nucleus for CO2 storage in woody plants. The cultivated plants are either used permanently on roads, in parks and gardens or, after decades of growing in forests, serve as long-term storage of the greenhouse gas in the form of building material.

The tree nurseries should receive a CO2 bonus from society, symbolised by the state, for this pioneering achievement as

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the creator of plant-based CO<sub>2</sub> storage. For example, a bonus payment per cultivated hectare would be an option to honour the tree nurseries' substantial contribution to fighting global warming.

## **Sustainability in dialogue with the customer**

To ensure that plant users - whether private or public - recognise how sustainably tree nurseries operate, companies throughout Europe are demonstrating a high level of transparency. More and more companies are being certified beyond the legal requirements in order to fulfil the high demands of customer groups with regard to social, resource-conserving and environmentally friendly standards.

European legal requirements in the area of sustainability are among the highest in the world. This is not only about environmental standards, but also about social and health aspects. European nurseries implement these standards verifiably and as a matter of course.

In addition, the various customer groups have specific requirements in terms of measurable standards, which are documented by various certificates. Our sector supports voluntary certification in accordance with customer requirements, but calls for standardisation of the systems among themselves.