

TECHNOLOGICAL RECOMMENDATIONS FOR CULTIVATION IN CARBOMAT SUBSTRATE (IN SLEEVES)

Preparation of a Carbomat substrate for planting out

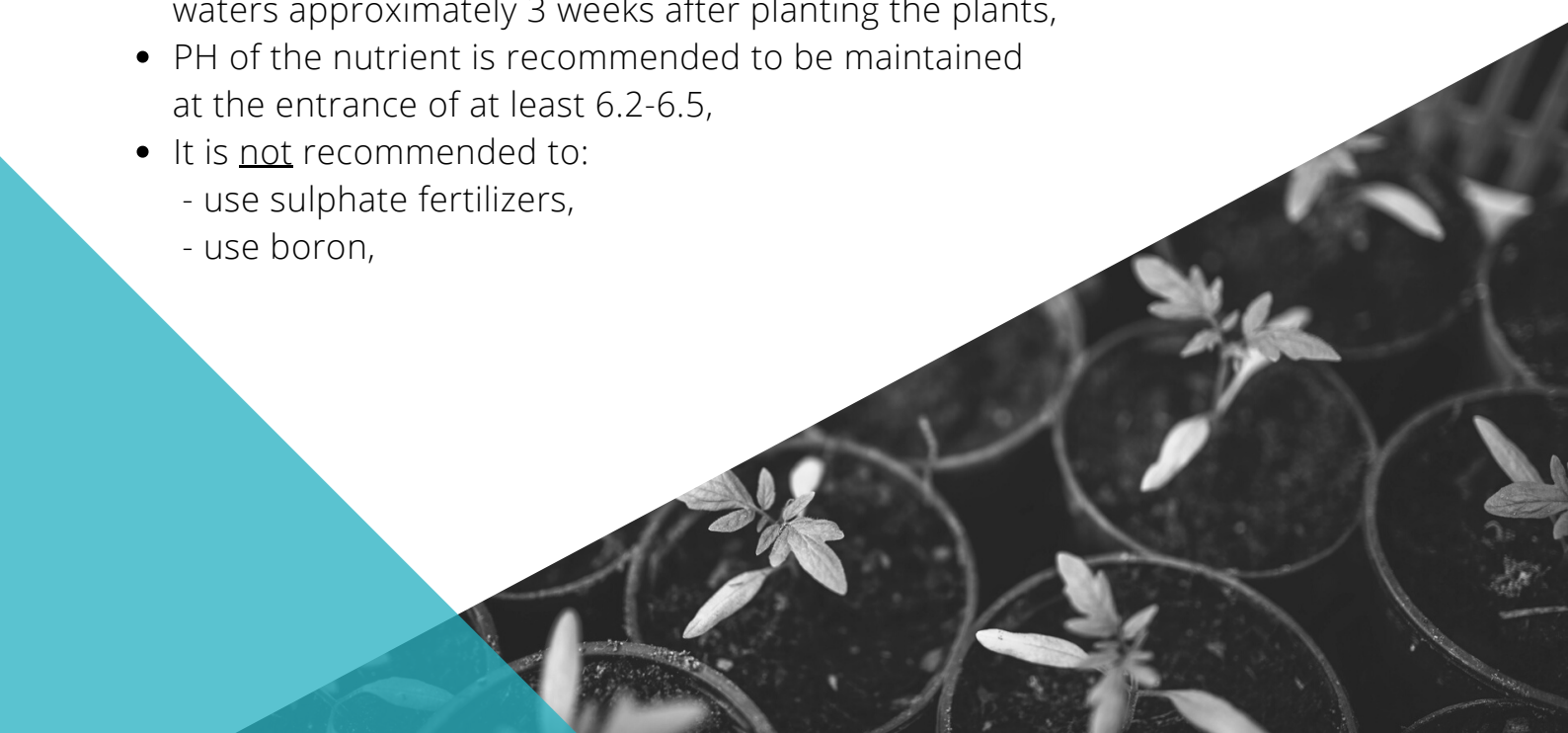
- flood the mat with water without the addition of fertilizers and acids in such an amount, that the water fills the entire surface of the mat and covers the substrate,
- keep the mat flooded for up to 3 days, adding water if necessary,
- after three days, make 2 or 3 drainage holes,
- the plant can be planted one day after the drainage holes have been made, indicated max. 50% humidity of the substrate, min. 30%.

Planting plants in Carbomat

- plants should be planted 24 hours after the drainage holes have been made,
- after planting the plants, start feeding them with nutrient solution,
- nutrient solution management should be carried out in cycles, ensuring appropriate drainage water expenditure,
- recommended overflow from the mat is 15% in the initial stage of cultivation (the phase of building the root system), 30% at a later stage (do not exceed 50% of the mat moisture).

Nutrition recommendation in the first year of cultivation

- The balance of the nutrient solution should be made on the basis of the water analysis and corrected on the basis of the analysis of drainage waters approximately 3 weeks after planting the plants,
- PH of the nutrient is recommended to be maintained at the entrance of at least 6.2-6.5,
- It is not recommended to:
 - use sulphate fertilizers,
 - use boron,



- It is recommended to:
 - limit the use of iron,
 - increase the use of copper by about 30%,
 - increase the use of potassium by about 20%,
 - increase the use of phosphorus by about 20% for the first 3 weeks, after planting,

Basic composition of macro- and microelements in mg / dm³

Ca => 1300 | Mg => 120 | S-SO₄ => 600 | Fe => 800 | B => 5 | Mn => 41
P => 4 | K => 6 | N-NH₄ => 7,5 | pH 4,5 |

General remarks

- The Carbomat substrate requires precise water management; the recommended cycles with the indicated pH ensure appropriate conditions inside the sleeve, whereas frequent rinsing ensures proper regulation of sulfur, iron and boron availability,
- Substrate humidity should be maintained up to 3 weeks after planting at 30% level, after this period it should be kept at a minimum level of 50%, which provides the plant with optimal conditions for the development of root system,
- The structure of the substrate prevents from flooding the root of the plant, furthermore the parameters of the substrate help to maintain the salinity of the environment at an appropriate level,
- The stable temperature of the substrate prevents the negative effects of stress caused by high temperature and the phenomenon of root replacement - it takes place without any negative impact on the yield of the plant,
- The carbon substrate in its area increases the CO₂ index, which affects faster growth and yielding of plants, prevents fluctuations of CO₂ in the greenhouse during airing,
- The nutrient solution for plants should be placed on the basis of the water test, taking into account the manufacturer's recommendations

