

Explore the world of



NordAgri  
*In peat we trust!*

# Frequently Asked Questions

🌐 Visit us:  
[nordagri.com](http://nordagri.com)



# Concerns regarding NORD AGRI Materials before use

---

## 1. When the packaging was opened, fungi was visible on the surface. What should be done?

Up to 98% of organic substance can be found in pure peat. Mold is attracted to organic materials. To make peat a growing substrate, lime and fertilizer are added to it. These additives make it easier for microbes to survive.

At this point, saprophytic fungi (and bacteria) that live on dead plant matter and airborne spores that are constantly present in the environment can penetrate the peat. Packaging for substrates containing fungi growth should be opened and thoroughly mixed to allow for as much aeration as feasible. The fungus mycelium rapidly shrinks following aeration. Since the fungi are entirely saprophytic, the mycelium of the fungus does absolutely no damage to the crop.

In the greenhouse, moist circumstances favor fungus growth on substrate surfaces, which typically results from airborne spores. Therefore, the environment should be made drier and there should be adequate aeration of the substrate and vegetation through all preventative and curative means. Use a dry crop irrigation to enable the substrate's surface to dry out. Reduce the greenhouse's relative humidity if at all feasible. On the market, there isn't a fungicide that works well against saprophytic fungus. Fungicides have very little impact on soil-borne pathogenic fungus.

## 2. The peat had an odd odor when the container was opened. What should be done?

It is possible for compressed peat goods to smell. This may be the situation following a lengthy journey in a hot climate.

The odor is similar to that of ammonia or rotting eggs. The hot temperature and low oxygen levels promote anaerobic microbiological processes in the compressed substrate, which is the cause of this indication. Since so many variables affect smell, it can be challenging to both prevent and investigate it.

Temperature during transportation, lead times for the cargo, the presence of microorganisms in the peat, and storage conditions after delivery.

Although there is still much to learn about the precise processes, it is anticipated that biological processes carried out by microbes result in the decrease of nitrate and sulphate. As a consequence, the substrate begins to smell, and occasionally less nitrate nitrogen is readily available.

This doesn't mean the substrate is of poor grade, though. The substrate can frequently be used without restriction if the following procedures are taken into account before use:

Immediately loosen the substrate to allow for aeration if goods exhibit fungi or smell. Existing gases can disperse, and when oxygen returns to the substrate, the processes are halted. If at all feasible, store for a day or two as bulk material and rotate occasionally. During aeration, the scent goes away.

### **3. How can Nord Agri goods be loosened?**

To avoid damaging the peat's structural integrity, the compressed substrate from Big Bale or bundles needs to be loosened up carefully before use. This is crucial for substrates with coarse structures, as excessive loosening or mixing could ruin the structure's coarseness and make it too fine for the intended use. Peat is severely harmed by high-speed mixers and the strength of grinding and combining machinery.

To meticulously loosen up the compressed peat, the grower must select the right machine.

On a spotless concrete surface, manually loosening the material with a fork or large shovel is perfect.

(Please refer to the Nord Agri document titled "General Guidelines for Use of Peat Based Substrates" for more information.)

### **4. What should be taken into account when potting?**

- When potting, it's crucial to take the substrate's density into account. The substrate should be slightly compressed because it is a soft substance in order to allow for good compaction and contact with the plant's roots.
- To ensure that the peat is in excellent contact with the roots of the plants, initial irrigation after potting or transplanting must be done right away.
- When potting, it's crucial to keep in mind not to pack the immature plants too deeply. The plant might descend too far after initial irrigation and compaction during transplanting, which would result in a lack of air and light as well as increased pressure from soil-borne diseases.
- (Please refer to the Nord Agri document titled "General Guidelines for Use of Peat Based Substrates" for more information.)

### **5. In what environment is peat best suited to be stored?**

Follow strictly "Fi-Fo" > First in, first out. Bulk deliveries stored inside or protected by clean plastic film. Propagation substrates use "as fresh as possible." Never stock bulk substrates inside the greenhouse. Never stock pallets in direct sunlight. Try to stock below 25 °C. Protect pallets with black nets against sunlight (UV stable). If possible, stock inside (no sun, no rain).

## 6. What should be done if the substrate's structure appears to be either too granular or too fine?

For each unique necessity, Nord Agri offers a wide variety of product recipes.

The foundation of effective crop cultivation is selecting the right recipe for each product and nursery. Please get in touch with the Nord Agri sales associates in your nation if a recipe is either too coarse or too fine for use in the nursery. They will help you choose the ideal merchandise from the Nord Agri line.

A appropriate recipe will then be suggested based on the types of crops, pot sizes, and growing conditions.

# Concerns regarding the application of NORD AGRICULTURE goods

## 1. Algae are growing on substrate surfaces in containers. What should be done?

Algae spores are always present in the environment (ubiquity).

### Possible sources are:

- Irrigation water
- Hose and pipes
- Greenhouse furniture and construction
- Wind (surrounding environment)

### Requirements of growth for algae are:

- pH level of 5–7 (algae will die at pH4)
- Presence of Nitrogen (NO<sub>3</sub>), Phosphate (P) and CO<sub>2</sub> required
- Free water (especially on horizontal surfaces)
- Warm conditions
- High relative humidity
- Shady areas

### How to counteract algae growth:

- Cover rainwater containers
- Add O<sub>2</sub> to rainwater (driving CO<sub>2</sub> out)
- Use filters for irrigation water
- Keep crop as dry as possible (consider a coarser structure for the substrate to allow more drainage and air)
- Use as little water as possible inside the greenhouse
- Ventilate as much as possible



- Reduce relative humidity
- Reduce shade where possible
- Decrease risk of condensation
- Repair leaks to roofs, pipes etc.
- Check greenhouse hygiene
- Apply algaecide (Mind it is toxic!)
- Cover the seeds with sand or Vermiculite, if possible in the specific crop

## **2. What causes fungal gnats to be present in the substrate? Does the substrate itself have fungus gnat larvae in it? What steps can be taken to stop the spread of fungal gnats?**

In just 21 days, fungus gnats go through four phases of development—egg, larvae, pupa, and adult—with numerous generations per year. They all happen close to wet, decomposing plants, algae, and fungus.

The ideal environment for flies to deposit their eggs is created by moist organic material, particularly a moist substrate surface. Fly infestations are possible inside or around structures, as well as in nurseries, greenhouses, and indoor plant spaces. All types of flies should be controlled using physical and agricultural techniques, mainly by screening windows and doors, as well as reducing moisture and organic debris.

Since the majority of an insect's life is spent as a larva or pupa in soil or organic matter, most control measures concentrate on the immature phases rather than the mobile, short-lived adults.

### **How to control:**

- Avoid overwatering and improve drainage;
- Allow for sufficient drying up;
- Clean up free-standing water and stop water leaks;
- Moist and decomposing grass clippings, immature organic compost, organic fertilisers, and mulches are favorite breeding places;
- Use yellow boards to control population;
- Treat with a combination of Steinernema nematodes and sulfur nitrate;
- Allow for sufficient drying up.

## **3. How long does a wetting substance remain active in a substrate?**

Under storage circumstances, the wetting agent's efficacy varies.

The chemical makeup of the wetting agent degrades quickly in situations where the product is stored in full sunlight and/or there are significant temperature differences between day and night.

Generally speaking, based on the storage conditions, the effectiveness lasts between 6 and

8 months. The wetting agent's effectiveness might have totally vanished after six months. Wetting agents are primarily used to promote rewetting during the first few weeks of cultivation, so their effectiveness must be concentrated during this time. A wetting agent works by reducing the water's surface tension, which makes it easier for moisture to pass through and penetrate the media's structure.

#### **4. Fine particles collect at the bottom of the pot during growth. What's the cause?**

This occurrence frequently has a connection to the quality of the selected recipe as well as the quantity of irrigation.

A condition known as "silting" occurs when too fine of a substrate composition is used in big pots. Fine particles smaller than one millimeter accumulate at the bottom of the pot, starving the roots of oxygen.

To prevent this impact, it is advised to use a product with a higher proportion of sod peat fractions and a lower proportion of surface milled peat if the substrate is used for long-term crops.

Increased irrigation in coarse-structured substrates may also hasten decomposition and wash the finer particles to the bottom of the containers, resulting in a muddy foundation. Therefore, it is always advised to grow vegetation in drier crop cultivation. In general, this will guarantee good root aeration, reduced pest and disease pressure, and a longer-lasting peat structure.

#### **5. The ground dries quite slowly after irrigation. What's the cause?**

In general, more water is stored in finer substrates than in coarser ones, which hold less water but more air. Make sure the substrate and your watering system are compatible. The makeup of the substrate might also be adjusted. Contact our sales associate if you require any additional advice. Please wait until the root system has developed before overwatering after planting.

#### **6. How should watering be done properly?**

- Early in the morning is the best time to water.
- The substrate and the foliage may therefore dry again during the day.
- The leaf itself needs to dry out over night to prevent plant illnesses.
- Avoid watering at midday. (under the strongest light). Due to the water drops working as a lense and increasing Intensity, this could result in leaf scorch.
- Some vegetation can be severely damaged by cold water. (e. g. African violet).
- The disparity between the irrigation water's temperature and the ambient temperature shouldn't be greater than 5–10 °C for these plants.
- Check to see that the base is entirely moistened and does not contain any dry areas. (check it in the pot). Please be mindful not to use too much water.

## **7. Weeds occasionally grow on houseplants. They seem to be coming from the peat bogs.**

Due to the peat bog's working procedures and safety precautions, this is highly unlikely. Peat fields owned by Nord Agri are meticulously prepped for excavation. The top layer of peat fields is extensively removed, and the boundaries are carefully observed and weeded.

The RPP quality control department conducts routine checks. Weeds are routinely inspected in raw materials. Additionally, only particular plants can develop in peat fields due to the low pH level and lack of nutrients in the natural peat. (sphagnum, certain sedges). No common field product can grow and disperse its seeds in pure peat. As a result, one of the key advantages of using peat in gardening is that it is naturally seedless.

Typically, weeds in agricultural cultivation come from the area around the nursery. To prevent weeds from growing in your produce, keep greenhouses and cultivation spaces clean and weed-free.

## **8. Is there a quality issue with the result if the pH level of the substrate decreases during cultivation?**

Since peat is known for being much more stable than other growing media, such as coir, where the buffering capacity is low, the pH-value typically drops much more rapidly, the substrate's dropping pH level has nothing to do with the substrate itself. The irrigation water's quality (soft water has a low carbonate content) and the sort of nitrogen in the fertilizer being used are the two main determining factors. There are specialized fertilizers on the market whose nutrient makeup supports pH equilibrium.

In general, during growth, nitrate-based fertilization and hard water raise the pH level of growing media, while ammonium-based fertilization and soft water lower it. The chemical exchange mechanisms between the plant and the growing medium are the basis for this effect.

## **9. What should be taken into account when collecting samples to determine a substrate's pH and EC levels? When measuring the pH and EC levels, appropriate sample preparation is crucial.**

The proper procedure is as follows:

Pick 10–15 pots of substrate for one set of crops. Get rid of the top 20% of the pot's base. Take caution when removing the plant and its roots. Sample substance could be easily removed from the root ball. Make careful to use material from the top, middle, and bottom of each bag and pallet when using packed substrates. A representative sample should be acquired following uniform mixing.

## **10. Cells that are too dry, too moist, or dry on top and wet on bottom are occasionally found when sowing into trays. What took place?**

To have the same quantity and composition of substrate with the same compaction in every cell, the filling process and compaction should be done very uniformly. Increased homogeneity will result from standard working procedures and potentially automated filling. A substrate that is evenly filled and compacted promotes homogenous germination, even water management, and ultimately uniform crop development. There are Nord Agri recipes available with increased sod peat amounts to address this issue and further promote homogenous filling.

To ensure a very consistent filling of the trays in fully automated systems, it is recommended to control the weight of the trays after filling.

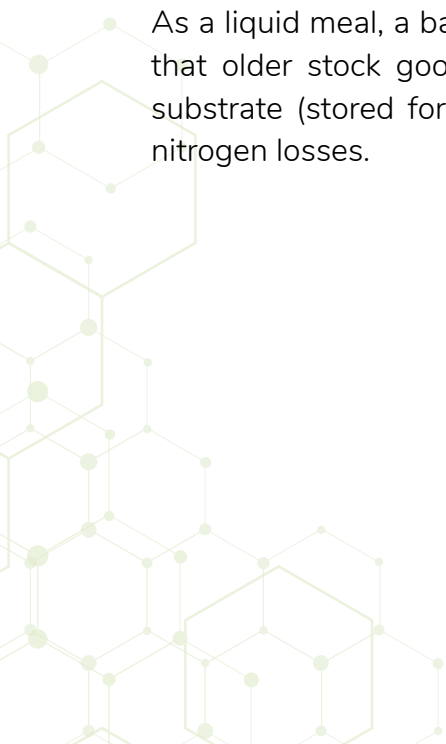
## **11. How long will the integrated fertilizer be effective? When should additional fertilization be done?**

The basic fertilization mixed into the substrate has a certain impact depending on the recipe, the crop and how much nutrition it needs, as well as the age of the product itself. A generic response is therefore not possible.

With a basic fertilization rate of 1 kg/m<sup>3</sup>, Nord Agri's fertilizer is typically thought to be useful for the first 10 to 14 days following germination in fine propagation substrates. Slower growing crops may need initial fertilization after 13 to 15 days, while crops with robust initial development and high nutrient demands may need it as soon as 8 to 10.

In order to correctly steer the liquid feed, it is crucial to keep an eye on the crop and the color of the leaves. The stems are another reliable indicator. Liquid feeding should begin as soon as the root tips touch the pot sides.

As a liquid meal, a balanced NPK fertilizer with trace elements should be used. It's possible that older stock goods have less nitrogen. Liquid feeding may begin sooner with older substrate (stored for more than 6 to 8 months after production) in order to balance any nitrogen losses.





# General questions about NORD AGRI peat products

---

1. Why should I choose raised bog peat when the grower may occasionally perceive the price to be high?
2. What distinguishes elevated bog peat from fen peat or local peat?
3. Do Nord Agri goods contain any nematodes?
4. Why does elevated bog peat not require disinfection?
5. What makes peat different from other growing substrates in terms of its ability to hold more water, nutrients, and air?
6. What distinguishes surface cut peat from sod peat?
7. What are the characteristics of sod peat, thin structured peat, and peat fibers?
8. Is the air capacity large if the fiber content is high?
9. Is black moss added to Nord Agri's products? Does the Nord Agri product appear darker because of black peat?
10. Raised bog peat comes in a variety of names, including: Why should I select goods from Nord Agri? What distinguishes Nord Agri goods from competing ones?
11. The Nord Agri containers appear to be quite small: How do I know that this box has a capacity of 250 litres?
12. Recipes for Nord Agri goods are plentiful and include: What are the requirements for selecting the best one?
13. How does one continue if a special recipe is required?

## 1. Growers occasionally deem raised bog peat to be expensive; why should I choose raised bog peat?

Raised bog peat's mix of financial, chemical, physical, and biological characteristics makes it the growing medium with the greatest advantages over all others. The uniformity of the material and its ideal properties are crucial for farmers to achieve the best crop outcomes and greatest crop security. In contemporary crop cultivation, workers adhere to set procedures (such as fertilization, irrigation, and pesticide spraying), which helps to maintain the substrate's stability (particularly with regard to its structure, nutrient supply, and pH value) and support a successful crop.

## 2. What distinguishes elevated bog peat from fen peat and local peat?

Fen bog and raised bog peat have very different raw ingredients. "Eutrophic peat bogs" are where the peat for fen wetlands is harvested. This peat is made up of numerous kinds of reed, birch and pine plants, sedges, and grasses. Its age fluctuates greatly, and its nutrient composition is irregular and complex. In most cases, fen bog peat offers high salt content along with an unpredictable and frequently high pH level. It is frequently heterogeneous.

On the other side, oligotrophic or raised peat bogs are the source of raised bog peat. It primarily uses different types of sphagnum peat grass. Peat formation occurs in an oxygen-deficient atmosphere that is waterlogged, guaranteeing lengthy humification processes. From a very lightly decomposed white peat to a more heavily decomposed frozen through black sphagnum peat, it demonstrates various phases of decomposition. Sphagnum plants still have a framework, and their cell structures function properly. Sphagnum peat moss has a poor nutritional content and a stable pH level. Due to this, using specially designed and improved fertilizer and lime stone, all plant requirements for nutrition and pH can be effectively controlled. (calcium carbonate). Since it is primarily composed of pure sphagnum moss, uniformity and physical characteristics are extremely constant. A large concentration of humic acids is present in raised bog peat, which promotes the growth of roots. It is devoid of weeds, nematodes, or other plant harmful microorganisms.

### **3. Do Nord Agri goods contain any nematodes?**

Plant pathogenic nematodes are not present in any Nord Agri goods. There is a chance that they have saprophytic nematodes, which have no mouth sting and can't damage living plants. Every peat grass on the planet contains saprophytic nematodes. The raw peat used by Nord Agri is subject to extremely stringent laboratory inspection. RHP quality standards, the strictest regulation for substrates in the world, are the foundation of the quality management for products. Additionally, national import and export inspections are carried out, and phytosanitary certificates attest to the absence of any pathogenic nematodes from the goods.

### **4. Why does elevated bog peat not require disinfection?**

Products made from raised bog peat do not require disinfection because the substance is extremely clean due to the development process. Raised bog peat has a very poor nutritional value and a low pH. Additionally, a peat swamp is saturated with water, and only plants that have been specially adapted can flourish there. There are no pests or diseases in the peat bog because no common field crop can develop on peat fields. This makes sure that no cleaning is necessary. Peat moss that has been taken from agricultural areas needs to be disinfected. One of the main advantages of raised bog peat from a fiscal and ecological standpoint is this. NA's quality management regularly monitors pests and diseases, which are verified by phytosanitary licenses. Disinfection may even be detrimental, according to some, because it eliminates the activity of helpful microorganisms. Peat that has been cleaned up loses the suppressive effect that helps guard against pathogenic plant diseases.

### **5. What makes peat different from other growing media in terms of its ability to hold more water, nutrients, and air?**

Sphagnum moss is a water plant with large cells and an interior cell structure resembling a sponge. The equilibrium between the capacity for air and water is ensured by the pore volume. Sphagnum moss' unique capillary structure ensures that the crop plant continues to receive enough oxygen. Peat has many advantages, including high air volume and high water

retention. Both factors can be regulated by particular raw material structures. As a result, peat can be optimized to meet the needs of both farmers and crop plants. Peat, a purely organic substance, has a large CEC (cation exchange rate) buffering capacity. When required, the humic acids in peat can continuously release nutrients to crop plants after absorbing them. Even the CEC and nitrogen buffer can be increased by additives like clay. Peat grass works well as a pH buffer to maintain a constant pH level during the growing season.

## 6. What distinguishes surface cut peat from sod peat?

Various harvesting techniques are used to produce basic materials with particular physical characteristics. In order to provide a controllable air and water ratio within the substrate and produce the best media for each crop, this enables us to select from a variety of peat types. The top layer of the white peat is milled right from the swamp to produce surface milled peat. This is the primary way of harvesting, producing homogenous material that is then screened into grades of 0-5 mm and 0-25 mm. These types offer a 10-15 vol% air capacity.

Sod peat is used, but it's obtained using a different harvesting technique, to improve air capacity and long-term structural stability. Cut from the bog, dried, and crushed in specialized mills in the plant are so-called peat "sods." To ensure a very low concentration of fine particles and therefore maximal air capacity, this raw material is then screened into grades of 1-7 mm, 5-15 mm, 10-25 mm, and 25-45 mm. Air capacities of up to 35 vol.% are offered by the 10-25 mm and 25-45 mm types.

## 7. What are the characteristics of sod peat, thin structured peat, and peat fibers?

### **Peat with fine structure:**

While larger structures in peat allow for more air capacity than finer ones, finer structures are better at storing water and water-soluble fertilizer. The crop and cultivation technique determine how surface milled and sod peat are used. While pot plants should be grown in a media combining surface milled and sod peat to produce the best physical properties and to improve drainage, seedlings can be grown in a product with fine structure.

### **Sod peat:**

Sod peat offers stable framework and air capacity. It builds a structural structure within the substrate along with peat fibers. Due to the intact cell structure, it also retains water and fertilizer. Because of the improved water drainage caused by its increased air capacity, sensitive plants' root systems can develop.

### **Peat fibers:**

Made from partially degraded Eriophorum, these fibers offer excellent structural stability and

water transfer. They contribute to the substrate's structural framework, which supports the dispersal of water, and they improve drainage effectiveness.

## **8. Is the air capacity large if the fiber content is high?**

Peat fibers help with draining by transferring water. The substrate initially appears soft and airy if the fibre concentration is too high. High drainage causes finer particles to collect at the bottom of the containers, which is silting. Therefore, sod peat cannot be replaced by a high fiber concentration in an appropriate growing medium.

## **9. Is black moss added to Nord Agri's products?**

Do the Nord Agri goods appear darker as a result of black peat? White peat is used in the majority of Nord Agri's goods. There are also specific goods with black peat added to them. The ability of plants to grow and irrigation methods influence selection. Peat substance is classified according to the H1–H10 scale of decomposition. (von Post scale). Nord Agri's low decayed white peat is classified as H2-H5. White peat that has moderately decomposed (H4–H6) is used as a starting material for specific uses, like the propagation of young vegetable plants. This raw substance is darker in color and retains water well. The last type of sphagnum peat is black, which is more decomposed (H7-H10) and only used for goods that require a high level of water retention. The degree of decomposition is linked to the various colors of peat. Even though the level of decomposition is comparable, older bogs have a darker color due to geological processes. The stability of the peat structure itself is generally stronger in older peat bogs.

## **10. There are many brands of raised bog peat available: Why should I choose Nord Agri products? What are the advantages of Nord Agri products compared to others?**

Due to the fact that the raw materials come from our own peat fields, the standard of Nord Agri's products is extremely reliable. Recipes are used all over the world, and crop circles and a large customer base attest to their excellence. The use of fertilizers, substitutes, and additives is carefully regulated and evaluated.

- High quality products for ensured crop security
- Production is based on strict quality schemes.
- Laboratory controls of each production batch are carried out before dispatch and full traceability is guaranteed for every batch and order
- Reliable supply all year round
- Technical support and the international technical network of Nord Agri provides information, support in case of questions.
- Highly effective fertiliser solutions, specific trace element fertiliser and the Fiba Zorb wetting agent provide highest crop security

## **11. The Nord Agri containers appear to be quite small: How do I**

## **know that this box has a capacity of 250 litres?**

The new 250L Nord Agri sack is designed for easier handling and transportation. Both employees and farmers benefit greatly from it. The formal European Norm EN 12580 is followed when measuring the volume of the substrate. Throughout the factory filling process, the volume of the bag is constantly regulated. The containers have the volume printed on them.

## **12. Recipes for Nord Agri goods are plentiful and include: What are the requirements for selecting the best one?**

The Nord Agri product leaflets contain details about the usual applications and the standard range of recipes. The staff of our sales partners will suggest recipes after speaking with growers about particular requirements.

## **13. How does one continue if a special recipe is required?**

The grower may speak with NA sales partners immediately about their request for certain crops or new market segments as well as for particular questions.

### **Please get in touch with your neighborhood NORD AGRI dealer if you have any additional questions.**

All of the material we offer has been compiled based on our best knowledge and convictions. As a result, we offer no guarantees about the accuracy and completeness of our information documents. We specifically retain the right to make modifications.

All application and utilization suggestions must be regarded as permissive guidelines that must be modified to fit specific local conditions and codes of conduct.

The assurance is void if the product is not kept in a cool, dry location away from sunlight and precipitation.

We cannot take responsibility for the existence of saprophytic organisms or any associated effects, such as the development of mycelium.



Explore the world of



NordAgri  
*In peat we trust!*

# In peat we trust

---

“Nord Agri” Sia  
Elizabetes street 2A-2, Riga,  
LV 1010, Latvia

(+371) 67 266 800  
info@nordagri.com  
www.nordagri.com