

ADVICE FOR HARVESTING THE COMMON SUNDEW (*Drosera rotundifolia*)

4H-association only accepts sundew from **trained** pickers!

1. Training the pickers

Pickers are trained to harvest the sundews and each picker is given these written instructions before they start picking. The association checks, that these instructions are followed. So called "wild picking" is forbidden.

The most important thing is to identify the sundew, and to tell the difference between the common sundew and other sundew species. The common sundew is a small (5-20 cm) perennial plant. It is a carnivorous plant, its roundish leaves form a basal rosette. The upper surface of the leaves is densely covered with red glandular hairs that secrete a sticky mucilage, and the plant uses them to catch insects for extra nourishment. The stem is leafless, upright and reddish. Small white flowers open on one side of the stem for a very short period.

Picking the English/great sundew (*Drosera anglica/longifolia*) is forbidden in all circumstances. Every picker must make sure the plants are not picked on nature reserves. More information about the land owners and nature reserves can be obtained from local forest management associations, ELY-keskus (Centre for economic development) or Oulu 4H association.

The picking is always started with a promise from the 4H-association. Cleanliness of the plants is checked during the picking and the receiving of the plants: mosses, needles, soil and sand must be removed, as well as larger insects from the mucilage on the leaves.

Adding water is forbidden. If the plants contain foreign materials or water, they can not be accepted for commercial purposes and the picking fees can't be paid for these plants.

2. Harvesting areas

Harvesting from nature reserves and roadsides is strictly forbidden. Ask the landowner for a promise to pick the plants.

Avoid picking in old sand pits and quarries and on pine forests that are in process of turning into marshes, because effective harvesting can destroy the whole population on these sites. However, harvesting is possible, if the site is not completely exhausted.

Harvesting is recommended on thick peat bogs, as on these the picking will cultivate the ground for new seeds, and the plant's distribution will not be compromised.

3. Timing of the harvesting

Harvesting must generally occur during July-August. This is the time the plants are flowering, and the preserving of seeding plants can be ensured. Plants are harvested while they have flowers or flower buds, because at that time their effective ingredients are at their peak.

4. Harvesting techniques

Picking the plants in right environments and with a proper method will ensure the new growth in the future. At least five best individual plants must be left on each square meter harvested to ensure the future yield. Any square may not be completely harvested in any circumstance. In each area only one harvest per season is allowed. Avoid picking when plants are sparse, and solitary plants can not be picked at all.

Seize the plant from the bottom of the stem. Yank the whole plant (including roots) from the ground. Roll the plant gently to drop of all sand, soil and insects.

Best time for picking is a cloudy but dry weather preferably in the evening or at night, when the plant is at its best and the natural moisture will improve the preservation of the plants.

Complete harvesting is always forbidden.

5. Harvesting diary

Of each batch delivered the picker fills in a harvesting diary (You will get the forms in the training or you can print it at www.oulu.4h.fi/luonnontuotteet/kihokki/ by the finnish name "Keräyspöytäkirja"). On the form you will enter the picker's contact information, harvesting area and time, weather conditions and other observations (flood has covered the harvesting area, exceptional amounts of insects etc.) during the harvesting, the amount picked and the signatures.

6. Harvesting environment and hygiene

Harmfull components from the environment (pollutants, pesticides, fertilizers) will accumulate in the plants. Therefore harvesting must be avoided for example on the roadsides, in densely populated areas and close to polluting industry. Distance to the nearest road must be 50-100 meters. Plants should not be harvested on fertilized or pest-controlled agricultural areas and forests because of high contents of nitrate and toxins.

Pick the sundews in a bucket or a clean food plastic bag. To keep the plants undamaged, avoid moving them from one container to another. During transport it is a good idea to cover the containers with a lid to keep sand and dust away from the plants.

Handling the plants will be done with the same hygiene standards as with food. Pick with clean hands: wash your hands with water and soap or keep disinfectant wipes with you to clean your hands. Don't use insecticides. The customer will control the quality also regarding the insecticides and traffic pollution.

7. Storing the plants



The daily yield is stored in open, clean containers in a cellar or in a refrigerator (storage in cool temperatures +2 - +8 °C). However, storing at home for more than three days is not recommended.

Throughout all phases of harvesting try to keep the plants as clean and fresh as possible, because the plants have to be of premium quality: there are Eastern European sundews coming to the market, and they are cheaper but of poorer quality than the ones 4H delivers. Our only asset to ensure future demand for our sundews is to keep our quality good. Don't freeze the plants, while it's not allowed them to freeze and melt before the final freezing.

Picking can be started three days before the reseption dates.