

How to collect a specimen and prepare it for transfer?

While collecting fungal specimens for further identification or to deposit them in fungaria/herbaria it is important to try to bring them as undisturbed as possible. When going mushroom hunting remember to take a basket with you, which will reduce a chance to squish your collected specimens and keep them aired. For tiny specimens some smaller containers, or a grid plastic box (used commonly in fishing, or to store jewelry or screws) would work perfectly.



When you find a fungus of interest in the field, photograph it first and collect it only after making at least one photo. This way it would be easier to identify the collected specimen. If you will find more than one specimen in a close proximity, try to collect from 2 to 4 of them. Perfect would be a collection of fruiting bodies of different maturity: still growing and fully developed.

While collecting a specimen try to gently unearth the whole fruiting body, together with the parts hidden in the soil or other substrate.

It is important to control which recorded ID number belongs to each collected specimen. To make it easier you can individually pack each collected specimen into a waxed bag, together with writing the ID number on the bag with a pen or a marker. If you are using a grid plastic box, you can place a small piece of paper with the ID number in each separate container within the box.



After coming home it is possible to add additional remarks about the collected specimens. Some characters important for identification maybe observed only after some time. For several species, color of the spores will be important feature. It is possible to check it by doing a spore print. In order to do so, a fully developed fruiting body is needed. For sporocarps with a stipe and a cap, cut off the stipe and place the cap on a white piece of paper, or a piece of aluminum foil, with gills or pores facing the chosen material. Leave such a cap for a few hours. When you lift it, a layer of spores should be visible on the material.



The last step needed in the preservation process is to dry the collected specimens. Preferentially use a mushroom/fruit dryer and set the temperature between 35°C to 45°C. It is also possible to place collected specimens in the dry, aired, sunny spot to dry them. In order to preserve your collection in good condition, your specimens need to be fully dried (cracker dry). After drying, store each specimen in a separate paper bag with a matching specimen ID, in dry conditions. This is important as dried mushrooms are hygroscopic and will get moldy if stored in a high humidity.

When your specimens are dried, stored separately together with the matching ID, and their records from PlutofGo app are uploaded to the database, they are ready to be sent for sequencing!

Read and watch more recommendations:

- Fungal Diversity Survey: Collect & Document section
<https://fundis.org/sequence/collect-dry/collect-document>,
- How to Make a Spore Print:
<https://namyco.org/interests/education/how-to-make-a-spore-print/>.