



TREASURES ON THE WAYSIDE

There is a herb for everything.



ICE Project: Informal Civic Education

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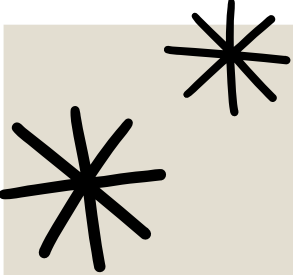
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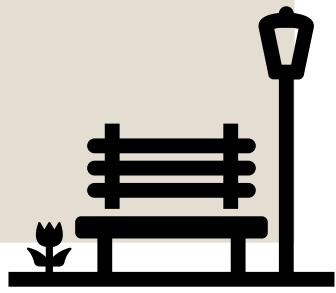
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Did you know ...?

Questions to get started

- Did you know that many **field and meadow plants** are edible and are even considered **medicinal herbs**?
- Do you know what **characteristics** you need to look out for when you want to **identify plants**?
- Do you know why **some plants** can be found **all over the world** and some **only in certain locations**?

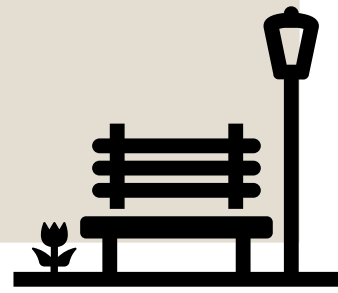


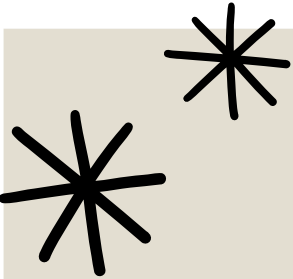


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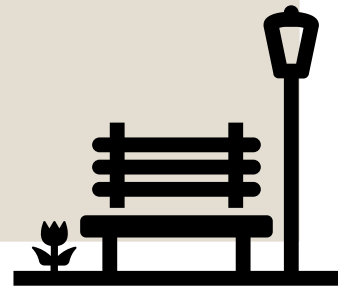




Plants on the wayside – weed or treasure?

- Many plants that are commonly dismissed as "weeds" can be used by us in many different ways.
- Their flowers and leaves are not only valuable food for bees, beetles and other insects, but can also expand our diet. Many wild plants are rich in nutrients and contain substances that can alleviate ailments or protect against illnesses.
- On the following pages you will find information on collecting wild plants, the identification characteristics of three selected representatives and suggestions for their use.

We invite you to discover the treasures on the wayside!





Before you start:

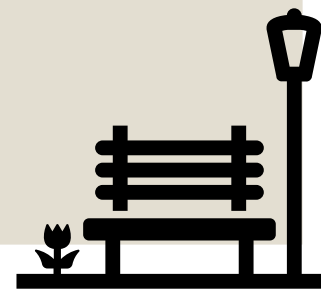
TIPS FOR SEARCHING AND COLLECTING

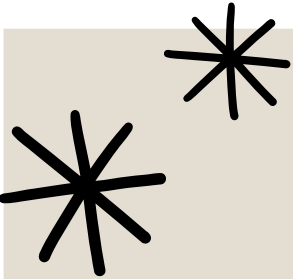


Before you start: tips on searching and collecting

- Before you start your search for wild plants, please note our **ten valuable tips** for your practice:
 1. The most important rule: **only collect what you can identify with certainty!** There are poisonous plants that are confusingly similar to well-known medicinal herbs. **If you are unsure, do not harvest!**
 2. To identify them, you need to know about their appearance, season and location. **Helpful identification features** are:

Leaves	Blossoms	Fruits and seeds	Stalk	Specific properties
<ul style="list-style-type: none"> • Colour, shape and size • Quantity • Position • Structure • Haptics • ... 	<ul style="list-style-type: none"> • Colour, shape and size • Arrangement & symmetries • Odour • ... 	<ul style="list-style-type: none"> • Colour, shape and size • Ripening time • Position on the plant • ... 	<ul style="list-style-type: none"> • Colour, shape and growth height • Diameter • Strength (e.g. whether hollow inside) • ... 	<ul style="list-style-type: none"> • Odour • Plant milk • Stinging hairs • Thorns • ...





Before you start: tips on searching and collecting

3. **Only harvest** the **parts of the plant** that you will **use**. With some plants, for example, only the leaves are edible or wanted. **Leave the rest behind**.
4. Take **a maximum of one handful** of wild plants and **never** harvest the **entire crop** in one place. There must always be enough plants left to ensure that they can continue to grow in this location.
5. **Never collect protected or endangered plants**. Collecting is always prohibited in nature reserves!
6. **Do not collect** from busy **roads, railway tracks**, freshly fertilised fields and places where **pesticides** are used.
7. Use a **knife, scissors or your fingernails** for harvesting. Tearing off plant parts damages the plant too much.
8. Place your harvest in a **lunch box or a stiff paper bag** to protect it from crushing.
9. **Gloves** can be **helpful** to protect against injuries.
10. Take **identification books or apps** with you to look things up when in doubt.





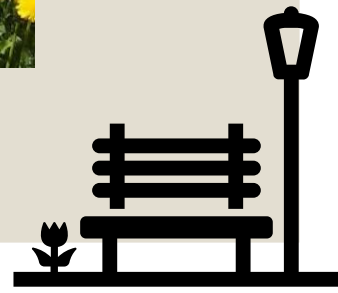
A portrait of selected wild plants

DANDELION



Dandelion - an approach

- You've probably already seen a dandelion. A short video gives you an overview of this special plant. You can then find out more about its identification and use on the following pages.
- Video: Dandelion: The Plant That Conquered The World
<https://www.youtube.com/watch?v=VLvPrd7L1MQ>



Dandelion

recognition and identification



- *Dandelion* is not just a plant, but a genus of plants that includes several thousand species, such as the common dandelion (*Taraxacum sect. Ruderalia*).
- The flowering period varies, usually from spring to autumn.
- Habitat: nutrient-rich meadows, fields, paths and roadsides.
- The dandelion can be found on all continents of the world. A plant that is so widespread is also known as a *cosmopolitan* [from the Greek kosmopolitēs = citizen of the world]. Cosmopolitans are plant or animal species or groups that are found all over the world (i.e. on all habitable continents or in all oceans) or at least over most of it. Sometimes people are called cosmopolitans too.

Dandelion

recognition and identification

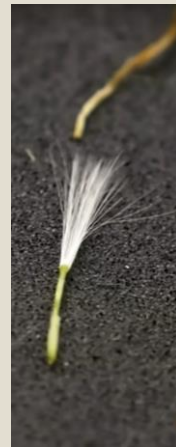


- head with many individual ray florets in a plate-shaped basket
- Colour of Flowers: strong yellow, later white with “umbrellas“
- flower head closes at night, rain and lack of water
- leafless inflorescence stalk, often several from one leaf rosette
- approx. 10-50cm high
- slightly felted on the outside, hollow on the inside
- carries white latex
- green, flat, egg-lanceolate, deeply and strongly toothed, usually less strongly incised at the leaf tip
- leaves grow densely in a rosette close to the ground, approx. 10-30cm long each
- Taproot dark brown on the outside, reaches 1-2m into the ground



Dandelion recognition and identification

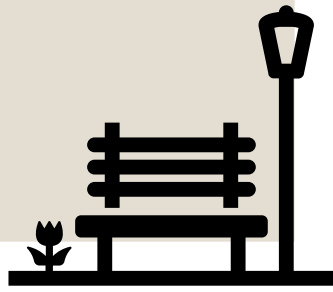
- The flowers of the dandelion change characteristically over time. Each individual ray floret (yellow) has an ovary at the lower end, from which a seed later matures. The petals are shed. What remains is the characteristic white umbrella, called a pappus, which allows the seed to fly very long distances to grow new plants and colonise new habitats.
- The pictures below show different stages up to seed maturity.





Dandelion collection and utilisation

- Dandelion is very rich in vitamins. The bitter substances it contains stimulate digestion, help with bloating and flatulence. Dandelion has a diuretic effect.
- Dandelion leaves taste best before flowering, when they are less bitter. Use them raw in salads. Boiled, steamed and fried they can be used like spinach.
- The buds can be pickled like capers.
- The dried, roasted and ground roots make a caffeine-free coffee substitute.
- The flowers are used raw as an edible decoration, but can also be processed into syrup or jelly.

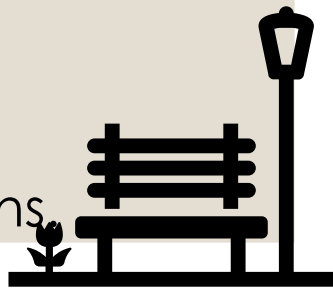




Recipe idea: Dandelion syrup



- Dandelion flowers can be used to make a delicious syrup that offers variety and is a good vegan alternative to honey. You can proceed as follows:
- Collect 100g (approx. two cups) of dandelion flowers without stalks and steep them in cold water for ten minutes.
- Drain the flowers and bring them to the boil in a pan with 350ml of water and a few slices of lemon. Reduce the heat and leave everything to simmer for approx. 15 minutes. Then remove the pan from the heat and leave everything to infuse overnight at room temperature.
- Pour everything through cheesecloth the next morning. Squeeze out the contents.
- Weigh the amount of liquid and measure out the same amount of sugar.
- Put the liquid and sugar together in a pan and leave to simmer for approx. 30 minutes until the desired consistency is reached.
- Pour the finished syrup into a sterilised (boiled) jar.
- The dandelion syrup can be kept at room temperature for several months.





A portrait of selected wild plants

RIBWORT PLANTAIN

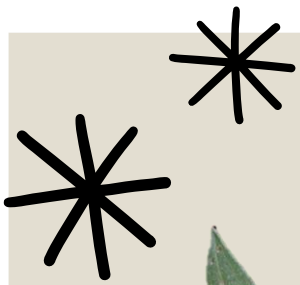


Ribwort plantain - an approach

- Ribwort plantain can be found on most meadows and paths, but is often overlooked due to its rather inconspicuous appearance. However, it is worth taking a closer look, as this multi-talented wild herb has a lot to offer. On the following pages, you can find out more about this miracle cure on the wayside.



Ribwort plantain recognition and identification



- Ribwort plantain (*Plantago lanceolata*) is a plant species of the plantain genus (*Plantago*).
- Time of main flowering: May to September.
- Habitat: Meadows, fields, roadsides, sun and partial shade
- Ribwort plantain has spread from Europe and Asia to all continents of the world. As an originally non-native plant that settles in new places, it is a *neophyte* [from *neo-, Greek phyton = new plant]. Neophytes are plants that have only become an integral part of the flora since around the 16th century (i.e. after the exploration of America by European seafarers). Some neophytes threaten or displace native species, others do not.

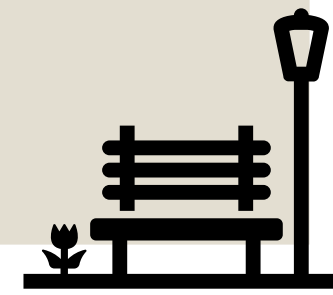


Ribwort plantain

recognition and identification



- distinctive, cylindrical, spike-shaped inflorescence
- small, inconspicuous, greenish flowers on top
- long, leafless inflorescence stalk can grow to a height of 5-50cm
- often several inflorescence stalks growing from a leaf rosette
- leaves are entire, narrow-lanceolate and taper at the upper end
- distinctive parallel longitudinal leaf veins are characteristically
- leaves become approx. 2-30cm long, 0.5 to approx. 3.5cm wide
- leaves grow upright from a basal rosette (usually several rosettes per plant)
- strongly branched root can reach up to 60cm deep





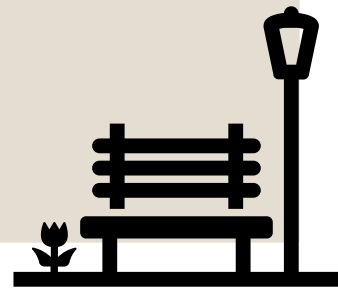
Ribwort plantain collection and utilisation

- The leaves of ribwort plantain can be used in a variety of ways. Harvested before flowering, the young shoots are particularly suitable for salads. When cooked, they enrich sauces, soups and stews. Dried, the leaves make an effective tea or infusion for use in compresses.
- Ribwort plantain syrup supports the immune system, has an anti-inflammatory, cough-relieving and expectorant effect. The healing properties of ribwort plantain have been utilised since ancient times.
- The juice of the leaves has an anti-itching effect on insect bites. When applied to scratches and abrasions, the sap has an antiseptic and blood-stopping effect. To extract the sap, the leaves must be crushed or chewed before application.
- To prevent blisters or protect them from further friction, cleaned sheets can be used like plasters for the respective areas.



Recipe idea: Ribwort salve

- You can utilise the healing power of ribwort plantain for minor injuries such as scratches and abrasions by making a salve from the leaves. The following video shows you detailed instructions on how to make it:
- Video: Plantain Salve - How to make it, and why you'd want to https://www.youtube.com/watch?v=3bQsJz4qe_E





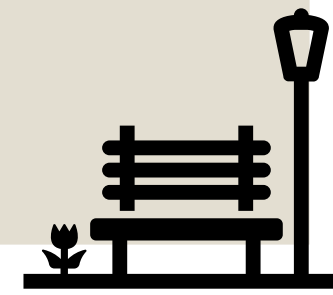
A portrait of selected wild plants

STINGING NETTLE



Stinging nettle - an approach

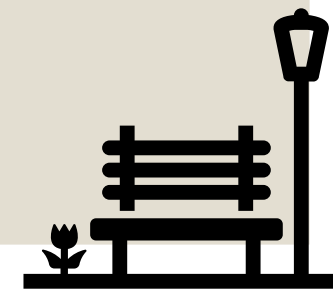
- The stinging nettle, or rather its nettle venom, remains in your memory when you touch or brush against it. However, it does not do it justice if burning is the only thing associated with it. The stinging nettle can do so much more and is already being used as a true super talent in many areas. You can find out more on the following pages.

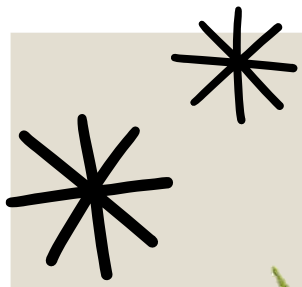


Stinging nettle

recognition and identification

- The stinging nettle (*Urtica*) is a genus of plants, of which the common nettle (*Urtica dioica*) is the best known.
- Time of main flowering: June to October.
- Habitat: nutrient-rich soils, meadows, forest edges and roadsides.
- Nettles prefer to grow in nitrogen-rich soils, which is why they are considered *indicator plants*. Indicator plants are plants whose presence indicates certain chemical or physical properties, such as the nutrient content of the soil, the pH value or the local climate at the habitat. Dandelions and blackberries are also considered indicator plants for nitrogen-rich soils, while blueberries indicate acidic soils.





Stinging nettle recognition and identification



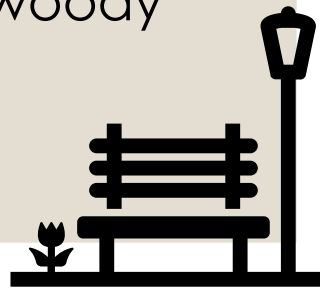
- dioecious: female and male plants
- inconspicuous flowers growing in green-grey panicles
- female: inflorescences rather drooping, appear denser and more clustered, form green-brownish seeds after pollination
- male: inflorescences stick out further, partially protrude upwards, appear green-yellowish due to pollen

- heart-shaped with pointed end, deep veins, serrated leaf edge
- leaves grow in opposite directions
- the typical stinging hairs are found on leaves and stalks

- growth: perennial, approx. 30-150 cm high, usually in large clumps
- stalk angular, becomes darker over time, can become woody

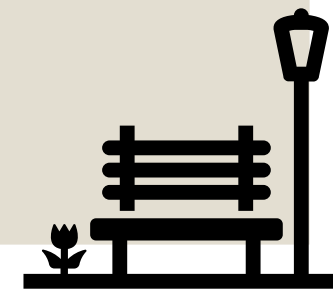
- roots reach a depth of approx. 70 cm

Pic: Prostagutt (undated), <https://www.prostagutt.ch/de/prostagutt/brennnessel>, snipped & cropped.
Waldsamkeit (n.d.), <https://waldsamkeit.de/brennnesseln-essen/>, snipped.



Stinging nettle collection and utilisation

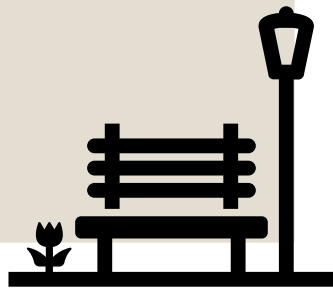
- The stinging hairs on the leaves contain a nettle poison that can cause redness, swelling, itching and pain on contact with skin. Gloves should be worn when harvesting and processing. Leaves for raw consumption should be rolled through. The effect of the poison disappears after kneading, cooking or drying.
- The fibres of the stinging nettle can be used to make textiles. The resulting fabric is soft, elastic, breathable and tear-resistant.





Stinging nettle collection and utilisation

- Nettles are true miracle cures in natural medicine and are very versatile. In the kitchen, they can be used raw in salads or in a pesto, as an ingredient in cooking they are suitable in all variations for soups, stews and braised dishes. They are also a good ingredient for patties and herb marinades. Dried leaves make an excellent tea.
- Nettles are rich in nutrients such as iron, magnesium and potassium, and contain even more vitamin C than citrus fruits. They detoxify the body and can alleviate symptoms of rheumatism, arthritis and skin diseases. Nettles have a diuretic effect.
- Hair tonic made from nettles stimulates blood circulation in the scalp, which can help with hair loss, itchy scalp and dandruff.
- Nettle brew is a natural remedy against aphids and caterpillars.

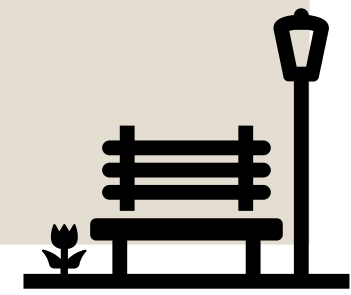


Recipe idea: Nettle pesto

- You can make a delicious pesto from nettles, nuts and oil that you can use for pasta, as a spread or dip. Use different nuts and oils to vary the flavour. You can find a basic vegan recipe here:
- You need the following ingredients:

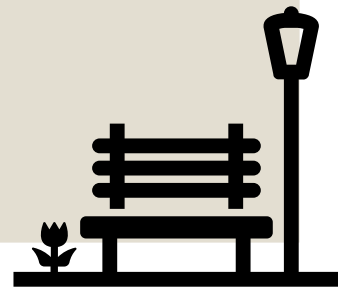


- **approx. 90g fresh nettle leaves** (blanched, squeezed, chopped)
- **115g walnuts** (alternatively: pine seeds, pumpkin seeds, sunflower seeds, cashews or other nuts or seeds)
- **1-2 garlic cloves**
- **2 tablespoons of yeast flakes, vegan cheese or hard cheese as preferred**
- **2 tablespoons freshly squeezed lemon juice**
- **1 teaspoon grated lemon peel**
- **3-6 tablespoons of olive oil** (alternatively: safflower, walnut or pumpkin seed oil)
- **Salt and pepper:** to taste



Recipe idea: Nettle pesto

1. Roast the selected nuts in a pan without fat until they turn brown. Make sure they don't burn! Put them to the side.
2. Blanch the nettles: place them in boiling salted water for a maximum of 60 seconds, take them out and immediately place them in a bowl of ice water.
3. Remove the cooled nettles, allow them to drain and carefully squeeze out the excess water with a kitchen towel.



Recipe idea: Nettle pesto

4. Place all the ingredients and half the oil in a food processor or a bowl that you can use with the hand blender. Puree the ingredients.
5. When the pesto becomes creamy, you can add more oil and continue blending. The longer you blend it, the finer it will be in the end.
6. Decide how fine you want the pesto by your taste.
7. Pour the pesto into sterilised jars or use it immediately.
8. You need to store the pesto in a cool place and consume within a few days.



Enjoy your meal!



To conclude:

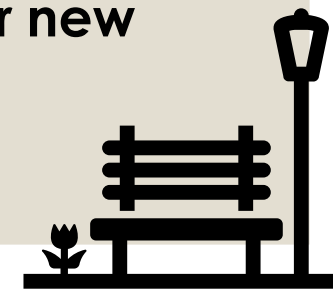
NOTES ON PROCESSING AND CONSUMPTION





To conclude: notes on processing and consumption

- **Clean** the plants **where you find them**. This will prevent the unwanted spread of seeds and pollen.
- There are frequent warnings about the **fox tapeworm**. Serious damage is indeed possible, but the risk of infestation is low. If you want to be safe, only harvest **higher than knee-high**, **wash carefully** and **heat to over 70°C**, e.g. by blanching the harvest.
- Collect the plants **as fresh as possible**. If not, preserve them with salt, sugar, vinegar or by drying. Store fresh harvests in the fridge like vegetables.
- The **tolerance** of wild plants can vary from person to person. Test the **dosage** and **effect** carefully.
- **Start with simple dishes**. The easiest way to include wild plants in your diet is in a salad, smoothie or herb butter. **Try it out, experiment a lot and discover new possibilities**.





Quiz questions

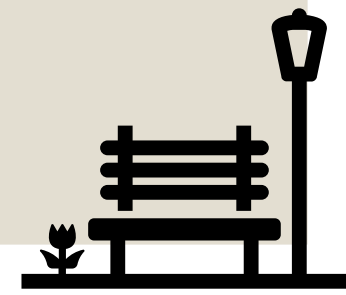
**TEST YOUR
KNOWLEDGE!**





Quiz questions – test your knowledge!

1. What **ten tips** should you follow if you want to look for and collect wild plants yourself?
2. What are **neophytes**?
3. What characterises **indicator plants** and what do they indicate, for example?
4. How can the **nettle poison** of the stinging nettle **be rendered harmless** so that it doesn't sting when eaten?



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