

Soil conditions for *Hepatica nobilis* var. *nobilis*

Lime? Slightly acidic? Neutral? Strongly acidic?

Using various natural sites on the island of Öland in Sweden, I would like to show what a variety of soil conditions the liverwort can adapt to. The island lies separated on the eastern flank of southern Sweden and is connected to the mainland by an artificial bridge. Öland is known for its flora and fauna, which have their own peculiarities. There is everything from bog to limestone biotopes that plants with special needs could wish for. Besides *Hepatica nobilis* we can find there *Adonis vernalis* and different kinds of orchids, just to name some of the interesting representatives of the flora. When I was on Öland for the first time in Easter 1994, the *Hepatica* were just blooming, so I was lucky to find different locations. I already noticed then that the sites had different qualities. A few years later, my son went to this beautiful island and was armed by me with data on sites and with a PH-knife. Upon his return, he brought me accurate data of sites, soil values and other features. He was very accurate with his records, so now I can draw conclusions and write this article.

Generally in the books written and by so-called experts the opinion is represented, that *Hepatica* grows in deciduous forests, namely beech, in loamy soil, which should be very limy! We will now see, respectively read, that *Hepatica* is by no means found only in these soils and they are very variable in their requirements.:

Lime location?

It also exists, of course, on Öland, on the southern tip of the island. It is a very extreme site with limestone bedrock and grass cover on top. What is so remarkable about this site is that it is right on the water. It is barren land, covered by shrubs and some pines, so the plants get less shade than elsewhere. The PH value here is 7, which is in accordance with the doctrine.

The situation is different on the northern tip of Öland.

Location slightly sour?

To anticipate, we are now on a forest floor that has PH-6. It is a grove right by the sea, about 5 to 10 meters from the shore. During storms or high tide, some places are flooded by the salt water of the Baltic Sea. Alders, oaks, beeches and birches grow there in a dense break, with a lot of undergrowth. In summer it should be very shady and cool there, hardly a passage. The *Hepatica* grow here in large quantities, they seem to be very comfortable. Their variability is also Great, from dark blue to purple, red and white tones everything is represented. We saw a lot of plants here, but the individual specimens were rather small and did not seem to grow very wide, as in other locations..



Site with pH 7

Location Neutral?

Finally an ideal location? Oh, not again! There grow very nice large hepatica plants, flat in partial shade but under pine trees! To top it all off, on a sand dune about 200 meters from the water. It would have been so beautiful, the plants looked really good, shade was probably enough there, only the tree population and the earth did not fit so at all into the picture. At least the PH value of 6.5 seemed to be correct. Now we come to the most extreme what we found:

Location strongly acidic?

We did not have the 1st of April, but we are sure, of all days you do not find something like this! In the middle area of the island we found a small moor biotope, which is surrounded by the typical Bruchwald. One should hardly think it possible, also here grow Hepatica! In silent harmony with sphagnum moss and orchid, wild strawberry and sundew. One cannot get rid of the suspicion that the Hepatica wants to lead us around by the nose, the more one deals with it, the more mysterious it becomes. In any case, the PH value was 4.5 - 5. To everyone's credit, it must be said that only a few specimens of our beloved liverwort grew there.

So, our excursion across the island of all possibilities is over. We are left with only one question: How do the Hepatica really like their location!

From observations of all sites, I would summarize the following:

Hepatica like culture places in the shade, slightly moist in winter and spring. Summer dry cool places, humus-rich, well-drained soil that does not have to be chalky at all costs, but has a content of certain trace elements.

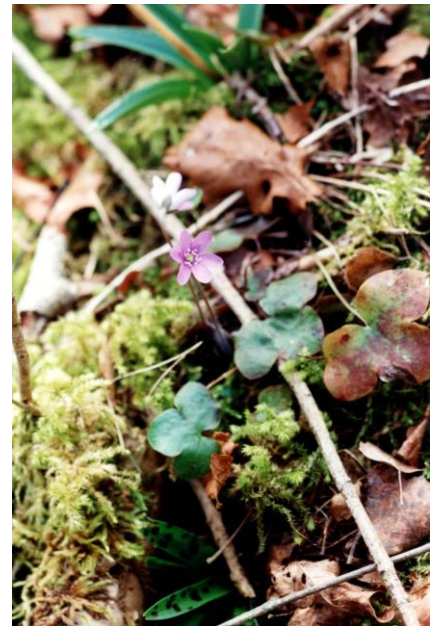
Jürgen Peters Januar 2001



Alder quarry location



Alder quarry location



Site with pH 5, bog



Site with pH 6, alder swamp



Site with pH 6.5, pine forest

Oelandsorten



`Oeland's Roter Zwerg`



`Oeland's Doppelstern`



`Oeland's Himmel`



`Oeland's Nacht`



`Oeland's Rosa`



`Oeland's Weiße`



`Oeland's Feuer`