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## Woad: A bridge between humans and plants



Woad (*Isatis tinctoria* L.) is an ancient cultivated plant that was grown in the medieval Europe in order to extract the indigoid dye. In Germany the cultivation of woad has a long tradition, especially in Thuringia. It was considered to be the "golden fleece of the country of Thuringia" which constituted the wealth of this region in the medieval times.

Fig. 1: Woad in the first season of cultivation with strong leaf rosettes (Photo: R. Kaiser-Alexnat)

For a long time woad was the only source for dyeing textiles blue in Europe. Due to the import of cheaper natural indigo from Asia, produced from *Indigofera* species, the cultivation of woad decreased during the 17<sup>th</sup> century. Finally, the indigo synthesis was developed by the chemical industry, and as a result the cultivation of woad stopped completely at the end of the 19<sup>th</sup> century.

However, nowadays woad is gaining significance increasingly. Due to a multitude of precious characteristics it is not only being re-discovered as a supplier of natural indigo – but it also attracts interest because of further manifold utilization potentials.

In line with a former research project I was engaged in the cultivation and evaluation of an extensive range of dye delivering plant species. Being one of the most important dye plants in Middle Europe, woad was especially taken into consideration.



Fig. 2: Woad in the second season of cultivation with flowers (Photo: R. Kaiser-Alexnat)

By now I am occupied with different tasks for research at the Institute for Biological Control in Darmstadt. But during a board conference of the institute, the chief of the institute encouraged us to check into the possibilities of research in the field of renewable resources. Immediately I remembered the dye plants and my earlier enthusiasm came right back.



In the course of the following inquiries my attention was drawn to the woad once again, because it has possible phytosanitary attributes. For example upon the rotting of the fruit of woad, allelopathic substances are set free, that inhibit the germination of seeds.

Fig. 3: Ripe fruit of woad (Photo: R. Kaiser-Alexnat)

While I was occupied with woad, it activated a search and prosecution for each and every idea and hints. I left nothing undone, followed every trace, reactivated earlier contacts and

made new ones. The activities opened out to the research application "Evaluation of the glucosinolate-myrosinase-system in woad (*Isatis tinctoria* L.)". This application was disapproved though.

I still wanted my enthusiasm for dye plants to live on in a different way. So at first I had the idea to found an "Institute for Woad". But since I wanted to create space for all dye plants, I finally realized the private homepage www.dyeplants.de.

It is hard to put into words what happened with me during this time. While elaborating the contents for the homepage – I can't say it any different – the stories just came upon me out of the blue. In December last year it arose, that these stories were published as contemplative Christmas surprises on the website www.dyeplants.de/andmore.html. This "Woadsite" emphasizes the quintessence of the message regarding the spiritual dimension of the woad:



#### "The woad contributes to the opening up of the Third Eye."

With our eyes we see the real things around us and with the Third Eye we intuitively see something more comprehensive. The human energy system shows the Third Eye in the colour of indigo.

The woad itself gives us a demonstrative cue regarding this aspect. The blue pigment Indigo is invisible in the woad – just as it is in other indigo delivering plants as well – because it exists in a colourless preliminary stage. The visible blue pigment Indigo emerges from a transformation process.

Fig. 4: Treated leaves of woad with unveiled Indigo (Photo: R. Kaiser-Alexnat)

At the beginning of the new year new statements of the woad were added:



### "I am the key to all plants."

To clarify this statement I asked my woad plant once again: "How do you mean that?" The answer was:

#### "It would be good, if I was everywhere."

I already figured why, but to be sure I just inquired once again and its answer was:

# "Because this way a bridge between humans and plants will be built."

Fig. 5: Woad in my garden (Photo: R. Kaiser-Alexnat)

Being an agricultural scientist I imagine it to be good if a woad plant grows in a garden or close to a field. If the gardener or farmer requires to contact the woad plant, he can perceive the hints of his cultivated plants better. This way the woad - an obviously multi-purpose useful plant - would **"open up completely new perspectives for agriculture"** (quotation of my woad plant).

English version translated by Jessie Jandt