

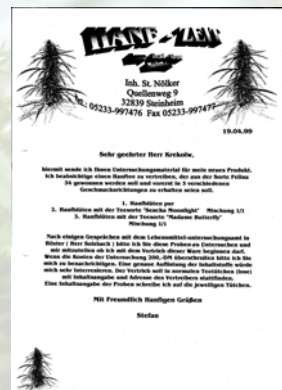
20 Years' Experience in Growing & Production of Industrial Hemp in Germany

A view from
Stefan Nölker-Wunderwald
Founder of Hanf-Zeit
company Germany



How it all started / The first harvest

- The company Hanf-Zeit started 1997 with a hemp-head & growshop in Detmold, Westphalia. Here we have established contacts to the hemp scene and the first available hemp products such as hemp seed oil and cosmetics distributed from this place.
- In the year 1999 we found a farmer in our region who cultivated hemp for the first time. He did not know exactly how to harvest and process this plant (he plants hemp to heal the MS of his wife).
- Here we came up with the idea of using the hemp leaves as well as hemp flowers for the production of tea and aroma pillows. After some consultation with the local food agencies we've got their ok.



So we went with about 20 friends to the first hemp harvest and need about 2 weeks to harvest the first 250kg flowers. This harvest was carried out with a double-knife bar mower. The blossoms were separated from the whole plant by hand, sorted, bundled and dried on linen for gentle drying in airy halls.

This drying process takes about 2-3 weeks.

We then packed these flowers into aroma cushions and sieved and blended them into various types of tea.

In the first years we had to register the hemp harvest at the local police. They need this information to be able to answer questions from people of our region.



Experience with harvesting and drying

In order to harvest hemp flowers as well as hemp leaves we had to gain a lot of experience how to produce a good quality in a good quantity.

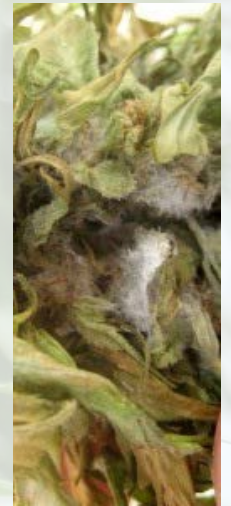
We harvested the hemp plants for the first 14 years exclusively with a bar mower and many handwork. This needed about 20 people to harvest 1 acre hemp in best quality. The bundled plants were dried in well-ventilated halls and attics of old farmhouses.

Various methods of "bundling" were tested: with hemp stalks, with rubber bands, with binding wire and a binding machine for bouquets.



Bad ventilation and fog in the wet season can lead to real problems.

Hemp flowers should be sorted out and bundled at least 1.5-2 hours after harvest and then brought to drying. Now they need very good ventilation and temperatures between 18-35 ° C. Also constant checks of the drying process are highly recommended. Eventually the goods should be turned daily during the drying process. A good quality result for dry hemp flowers is the "crackle" of the hemp stalk. Drying of hemp blossoms bundled on the line achieves the best quality in aroma and flavor. Here all flavonoids are largely preserved.



In order to be able to dry larger amounts of green mass, we have gained experience not only in drying on lines but also in a "herbal drying equipment". For this we have built a 400m² dryer. This dryer has 10 levels of 40m² each and was equipped with a heating, airflow and suction system. Here it was possible to handle about 0,5acres hemp flowers at once. This process was also monitored daily and the plants were turned when necessary. The drying time here is about 5 days.

Green mass from this drying method are very well suited as raw material for the production of food as well as raw material for the CBD production.

Great demand for raw materials for CBD - new harvesting technology must be produced

In the years 2012-2014 the demand of hemp flowers for the production of CBD increased significantly. With the usual "hand method" we could not handle these quantities anymore. With a mechanical engineering company we have launched the "HABE 2014" for this purpose.

A machine was developed which hung on the front loader of a tractor that can harvest hemp flowers in plant stocks between 0.5 and 4.5mtr.

The flowers are cut with a double knife and transported with a conveyor belt in a storage container. When filled it can easily be unloaded with the same conveyor belt into a trailer. This allows a quick harvest. Sorting and drying capacities are the limit of the daily harvest quantities.



Extension of Hanf-Zeit completely made of hemp

At the end of 2015 we decided to expand production, office and retail space. We had the idea to built this with the raw material hemp. We did this in cooperation with experts in the field of hemp building materials. A wooden stand was erected and was covered with a 34cm thick hemp-lime mixture by spraying. Inside of the building the floor slab and roof insulation were also designed with a hemp-lime mixture or hemp fiber mats. The interior of the building was plastered with clay plaster and the exterior with a lime-sand mixture. We moved in our new place in June 2017.



Legal problems with industrial hemp products

During almost 20 years there have been several problems with the legal situation of industrial hemp products. My first experience I gained with my wife during the delivery of the 2nd harvest in 2000. We were stopped by the police on the motorway in Germany with 200kg hemp blossoms for "Knaster Hemp" in our delivering car. This check took 14 hours incl. examination of the initially confiscated goods. After they had tested the hemp with 0.2% THC we were allowed to continue our delivering journey. THC-Limit in 2000 was 0.3%.

In July 2003 we got a house search of about 15 officials at the same time in the shop and in our private home. Over the whole day they took samples from hemp flour, hemp oil, hemp tea etc. This police-action showed only one result: The name Hemp-Love-Tea was not accepted (aphrodisiac). So we had to rename it - with the same recipe - to hemp tea "Damiana".

A few years later the criminal police of Paderborn phoned me: They had confiscated 50kg marijuana. A parcel service suspected prohibited shipping addressed to one of our customer and has informed the police. So they asks me to pick it up from the police station. Nothing else ! So it goes on until 2014.



Legal ?



Illegal ?



Hemp Tea and hemp blossom pillows come to court

In 2014 it came to an indictment which has moved over all the instances. The charge was: Trading with narcotics in large quantities. The state prosecutor of Paderborn complained to me that the distribution of pure hemp tea as well as hemp blossoms in aroma pillows to end customers was/is not legal. Plant parts of the genus cannabis stands in the narcotics, irrespective of the THC content i.e. also approved cannabis varieties. Trade, cultivation and production are legal only for commercial and scientific purposes which precludes an abuse for intoxication purposes of end users. The selling of pure hemp blossoms and leaves to the end customer is thus illegal. It came to 3 legal proceedings:

District Court Höxter: Judgment 13 months to 2 years probation – we appealed

District Court Paderborn: Clear acquittal – because of legal grown industrial hemp – State prosecutor office appealed

Intermediate Court of Appeal Hamm: sentencing to a fine – we are calling

Back to District Court Paderborn: instruction from the courts of justice further sentencing to a fine (slightly lower), products classified as not legal!

We have submitted a federal constitutional complaint to the Federal Constitutional Court in Karlsruhe. This was rejected with 2 sentences:

"Your complaint will not be accepted. This decision is indisputable"

Pure industrial hemp products (flower, leaf) are therefore illegal in Germany!



Petition for the distinction of approved cannabis varieties according to the EU-List on one hand and narcotics on the other

The Bundestag should decide that approved industrial hemp varieties are excluded from the list of narcotics.



Justification:

Since the come-back of industrial hemp in the year 1996 the cultivation of hemp varieties according to the catalogue of the Federal Institute of Agriculture is permitted on agricultural land. For this purpose, the variety and the quantity of sowing and the cultivated area must be reported to the Federal Institute of Agriculture. No special precautions against possible theft have to be taken. The low THC content of these plants of less than 0.2%THC excludes the potential misuse.

The initial idea of reintegration of this old crop was to open the industrial and scientific potential of this plant. However, problems arose in recent years through the distribution of hemp products, such as natural hemp tea to the end customer. Here a court decision was made by the Higher Regional court which forbids the distribution of raw hemp to the end customer. The court argues that regardless of the THC content, plant parts of the genus cannabis are enshrined in the Narcotics Act. The distribution of these goods, albeit legally produced, is regarded as a trade in narcotic drugs. The hemp that is used should be processed into a product that is no longer abusable i.e. Ropes, insulating materials, clothing, etc. Putting pure Hemp tea into circulation in Germany is therefore not possible. As long as all food regulations are complied with, the execution of this law makes no sense.



We started 1999 with the production of hemp leaves as well as hemp blossoms for tea and food. From this point until the year 2014 – i.e. whole 15 years we were monitored by the food-control authorities of Höxter. There were never any complaints. For legal certainty, we, in cooperation with this authority, obtained opinions from the Ministry of Consumer Protection which also fully approved our products.

Notwithstanding these approvals made by official government authorities, the above-mentioned court cases were made against us, and we were found guilty of the illicit trading of narcotic drugs. Since this court decision, the trade of these products are prohibited to the end customer. This means that legally produced agricultural raw materials such as industrial hemp blossoms and leaves are classified as narcotics when in reality they are not. In many countries of the EU, distribution is possible without restriction. This poses a competitive disadvantage for hemp producers within the EU. Also it carries the risk of being prosecuted for something which is in fact not illegal by law, but stems from a contradiction within the given law.

A clear distinction of industrial hemp varieties as well as narcotics is therefore inevitable.

The law may be amended accordingly.

**Hanf-Zeit,
Stefan Nölker-Wunderwald
June 2018**



Pioneers in the matter of hemp