

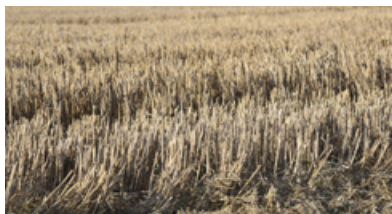
PRAXIS REPORT



Special edition: Mulching for plant cultivation

Case studies from the field

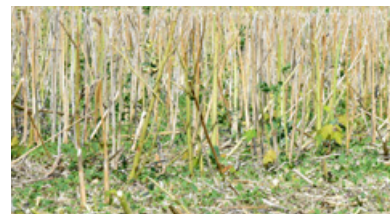
SUCCESS IN PLANT CULTIVATION



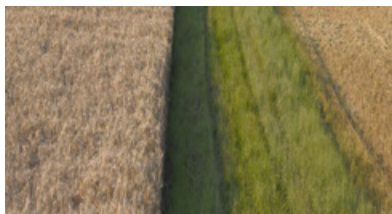
Grain stubble Uniform shredding and distribution of the crop residues ensures a smooth soil cultivation and sowing process. Fast decomposition of crop residues and optimal germination of volunteer grain reduces the use of pesticides in the next main crop. The uniformly distributed crop residues provide a uniform spread of nutrients and a homogeneous main crop.



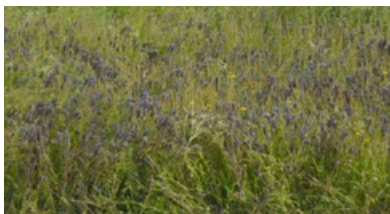
Maize stubble and maize stover Stubble which is shredded down to the rootstock provides little protection for leafroller larvae and disintegrates very quickly. Harvesting difficulties which can occur if the stubble is not shredded every year are avoided. Well-shredded maize stover decomposes quickly and this prevents Fusarium fungi from multiplying. As well as improving the quality of the next crop, this also significantly reduces the risk of high DON content*. *DON content = Proportion of deoxynivalenol (mould mycotoxins)



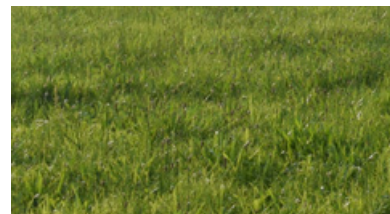
Rapeseed stubble Mulching breaks open unripe pods and exposes volunteer rape plants. The mulch is discharged in front of the support roller, which ensures uniform distribution and pressing of the crop residues and volunteer seed. This results in excellent germination of the volunteer rape plants. Diseases and fungi can persist in rape stover for a long time, while natural decomposition is also a very lengthy process. Intensive shredding speeds up this process and spore-producing fungi are not able to multiply.



Field edges Field edges which act as a buffer zone between pathways and cropped land have a high ecological value. Alongside a wide variety of insects and wild animals, many wild herbs can also be found here. Mulching shortly before the plants run to seed reliably prevents the seed from entering the cropped land. Intensive shredding allows the plants to grow through quickly and the edge of the field regains its rich green appearance.



Fallow land Fallow land is land which is not being used and where pioneer plants start to grow. Annual care in the form of mulching limits growth, while also ensuring a well-maintained appearance and effectively preventing changes in plant species. The mulch also helps to build up humus and increases soil fertility. An efficient result can be achieved with extensive shredding at high vehicle speeds.



Grassland Grazing cattle avoid plants which are less nutritious and less appealing, as well as the grass around piles of dung. As a result, these grasses can multiply easily and the feed quality of the pasture reduces. Mulching the grazed land reduces the growth of these species and spreads out the dung piles. Loose discharge behind the support roller facilitates an aerobic decomposition process without the formation of mould. The result is rapid growth of high-quality grasses.



Catch crops Catch crops are an option in sustainable agriculture for building up humus and preventing erosion. Nutrients can be stored and then reused through decomposition in the next main crop. Appropriate mulching at low intensity in the autumn stops the growth. In the spring, decomposition is

sped up through intensive shredding. The mulching process is thus the key to success in modern agriculture and is an environmentally friendly alternative for a more ecological approach.

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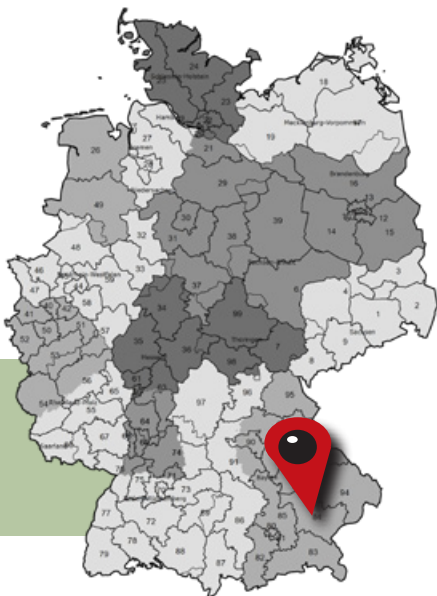
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FARMING IN UPPER BAVARIA



CROP RESIDUE MANAGEMENT IN ARABLE FARMING

THIS METHOD YIELDS RESULTS



The fields of the Huber Estate are located in beautiful Upper Bavaria. Hans Holland, his wife Elisabeth and one employee cultivate approx. 175 hectares of arable land and grassland here.

After the harvest, rapeseed stubble, grain maize stover and grain stubble are mulched to facilitate stubble processing and speed up the decomposition of crop residues.

The catch crops are also mulched before sowing maize, as well as before sowing legumes in the spring.

In addition to the cultivated areas, Mr Holland has more than 5 hectares of fallow land. Most of this is also mulched once a year.

Optimal crop residue management for almost 25 years

According to the principles of good professional practice, the mulching of maize stubble is essential:

The corn borer's habitat is destroyed and, at the same time, Fusarium fungi is prevented from spreading to the next crop.

The mulching process thus supports plant health in a biological manner.

Rapeseed and grain stubble have always been processed with the mulcher for about 3 years. The reason for this is clear: Faster decomposition by shredding the stubble.

Mr. Holland had no concerns about mulching from the outset.

Faster decomposition due to shredded stubble

That's because it quickly became apparent that the soil life was becoming more active as a result of the processing and that the crop residues were decomposing much more quickly.



Fallow land is mulched in an insect-friendly manner with the topping setting.



Optimal maize crops are achieved thanks to farming expertise combined with good climatic conditions.



Germinated volunteer oilseed rapeseed after soil preparation with the short disc harrow (left) and after processing with the mulcher (right).



Optimal shredding of the crop residues and even distribution on the land due to the variably adjustable cutting bar and spiral rotor.

FACTS AND FIGURES

Hans Holland, Farm Manager of Huber Estate, Upper Bavaria

- Size: 175 ha
- Soil value 35 – 68
- Types of soil: Sandy loam, clayey loam
- 900 mm/a of precipitation
- A range of crops on arable land, wint.-wheat, wint.-barley, wint.-rapeseed, maize, broad beans, catch crop cultivation
- Grassland: 0.8 ha
- Flower strips, flower fields, buffer strips: 5 ha

Use of mulchers in arable farming

- **MU-M 600**

Even the humus content in the soil has also improved considerably and the number of earthworms has increased significantly.

The soil life becomes noticeably more active

It is apparent that the soil becomes "lighter" as a result and is thus improved significantly.

One important aspect is the fact that optimally shredded crop residues can be mixed into the soil much better, which is particularly advantageous for rapeseed. Mulching the rapeseed stubble destroys the "green bridge" for snails, the cabbage stem flea beetle and sclerotia on top of the soil.

Easier soil mixing due to optimal shredding

The rapeseed fields of the Huber Estate were, for example, mulched directly after the harvest this year. This was followed by two flat passes with a cultivator before the fields were cropped with winter barley. This was done without a rotary harrow, just with light soil preparation.

The depositing accuracy during mulch sowing is definitely increased, which results in a more even crop germination.

Increased depositing accuracy for mulch sowing

Hans Holland has had very positive experiences with this process. For many years now, his sowing density has been below the official recommendation while producing the same yields - which helps to improve the bottom line.

"I am sure that the mulcher will also see more use at other farms in the future. Here at our farm we cannot do any more mulching - we already do it as much as possible. Mulchers are and will remain important machines in arable farming, now and in the future. I guarantee it!"



"MULCHING AS AN
IMPORTANT COMPONENT
OF AN OVERALL SYSTEM"

WE ARE THE CROP EXPERTS

Estate manager Maximilian von Laer lives with his family on the heritage-protected Gut Fürstenberg farm, south of Paderborn. State-of-the-art ploughless farming is practised here with plenty of passion.



FACTS AND FIGURES

Fürstenberg Estate, Bad-Wünnenberg, Paderborner Land Overview:

- Farm manager Maximilian von Laer, 1 trainee, 4 permanent employees
- 5 sites (max. 80 km) with a total of 1350 ha of cropped land (1200 ha combine-harvested area)
- Fully self-sufficient in machinery (except sugar beet, maize and carrot harvesting)

Main crops:

Sugar beet, winter wheat, winter barley, rapeseed, silage maize, broad beans, soybeans and carrots

Soils:

Ave. soil value 52, clayey loam to clay, loess-loam soils in places

Altitude and climate

70 – 400 m above sea level, 500 mm/a of precipitation

Special characteristics:

- Ploughless agriculture
- Lack of water in spring
- Issues with black grass and old volunteer rape
- Initial trials with direct sowing
- All tractors are equipped with crawler tracks or tyre pressure control systems
- Slope-capable combine harvesters

"I think mulching maize stubble is absolutely essential."

Maximilian von Laer, Farm Manager of Gut Fürstenberg



INTERVIEW WITH FARM MANAGER MAXIMILIAN VON LAER

Mr. von Laer, which types of mulcher do you use on your farm?

For several years now we have been using a combination of a front mulcher and rear side mulcher for field and track edge maintenance. Initially, we also mulched our silage maize stubble with this. For three years we have also been using a rear mulcher with a working width of 6 metres for stubble processing.

In which crops do you use these implements and why?

Our large area mulcher is mainly used after rape, on silage maize stubble and on some areas of grain stubble - with a definite upward trend. Altogether we use it on about 450 hectares per season.

By mulching the silage maize stubble, we effectively prevent corn borer infestation on the one hand, and, on the other hand, the processing with the mulcher makes the subsequent ploughless soil preparation and cultivation much easier. We hardly have any problems with machines becoming clogged



or stubble lying on top. I also believe that the risk of Fusarium fungi in the next crop is significantly reduced.

In our case, the main reason for the investment in a larger mulcher was to use it on rapeseed stubble in order to get a grip on the existing problem with old volunteer rapeseed and the associated drop in rapeseed yields. With regard to the germination of (old) volunteer rapeseed, the mulcher has decisive advantages over mechanical soil preparation in the first pass: It draws in the grains and crop residues, breaks open pods that were still closed and deposits a flat, loose mulch layer behind itself. These are optimal germination conditions.

Grain stubble has developed into a further application area for the mulcher. Due to our conservation soil cultivation approach, we try to keep the stubble as short as possible. However, this is not always possible with combine harvesters alone. The reasons for this include, for example, deep tramlines or raised tramline edges caused by fertilisation with liquid manure/fermentation substrate in spring. The mulcher is also used in this case, as well as for lodged areas and areas damaged by game.

What changes have you noticed so far as a result of the mulching process and what experience have you gained?

I see the mulching of maize stubble, for example, as absolutely essential in many regions. With regard to the problem of the "corn borer", we as a large farm naturally want to set a good example and ideally shred the stubble immediately after chopping the maize. However, effective and comprehensive control of the corn borer can only be successful in the long term if all farmers address the problem.

After the rapeseed harvest we were able to observe not only better germination of the volunteer oilseed rape, but also that the stubble that was effectively shredded by the mulcher did not lie on top for as long and, above all, did not hinder the subsequent soil preparation process.

Last year in particular, we were able to observe that the use of the mulcher on grain stubble also makes sense on fields with heavy black grass growth. It creates a real wave of seed germination and thus makes it easier to subsequently control. We have to get the black grass problem under control here. In addition to our now very long crop rotation and the use of new methods



Use of mulchers in arable farming

- MU-M 600 for rape, maize and grain stubble
- Combination of MU-M/S 220 front and side mulcher for field and track edge maintenance, ditches and embankments

and techniques, the mulcher will also play a greater role here in the future.

In general, we have noticed that short stubble and crop residues decompose much better and faster. In addition, the subsequent soil preparation is made easier and the straw can be worked or mixed in better. We also deprive mice and snails of their habitat in this way and contain them effectively.



Tip for saving water

The employees of the estate often have to struggle with spring drought in their farming areas.

Due to the dryness in recent years and the increased cultivation of summer crops, every millimetre of water that is not removed from the soil is important. Within this context, Mr. von Laer has been trying for two years to sow catch crops into the stubble immediately after threshing. So far with success. Mulching instead of the first stubble processing also helps to save water in this case.

In my opinion, the mulcher, combined with the use of other techniques and machines, represents an important part of the overall system. In our case, this overall system is conservation soil cultivation with all of its pitfalls and challenges. These include the problem of old volunteer rapeseed, the increased emergence of weed grass and a modified crop residue management system.



ORGANIC FARMING IN THE RUHR VALLEY

ORGANIC PUMPKINS FROM KAMEN

A SPECIAL KIND OF CROP RESIDUE MANAGEMENT





The farm of the Ligges family is located in the east of the Ruhr valley. A total of three generations live and work here together. Volker Ligges, a state-certified farmer, runs the market garden together with his wife, children and parents as a sideline. Two years ago, they converted their farm to organic farming. His wife Ute, a master florist, runs the farm shop with direct marketing and organises events such as pumpkin carving courses and conferences. His son Julius is studying agricultural science and wants to join the farm after graduating. Contrary to current developments in agriculture, they want to develop their business from a sideline into a full-time operation in the next few years.

What are the special characteristics of your farm?

One of our specialities is certainly our pumpkin growing. We grow over 200 different varieties of ornamental and edible pumpkins, which are marketed exclusively direct-to-customer through our farm shop. Most of the potatoes are also marketed through the farm shop or the Regiomat vending machines. With the changeover to organic farming two years ago, we also started keeping laying hens. The animals are kept in two mobile chicken stalls, which are moved about once a week. The dry chicken manure is transported together with clover grass and vetch rye from our farm to a

partner biogas plant. In return, we receive fermentation substrate as fertilizer for our land. For me, it is an environmentally friendly and economically sensible cycle.

"The use of the mulcher plays a very important role for us."

What role does the mulcher or shredding of crop residues play in your business?

The use of the mulcher plays a very important role for us. It is used regularly in both our arable farming and for the laying hens. After each change of location of the mobile chicken stall, a topping cut is carried out with the mulcher on the old grass/clover grass area. The second main area of application is the shredding of the remaining pumpkins and pumpkin plants after harvesting. Due to damage or quality defects, we are unfortunately unable to use or market all of the pumpkins. The pumpkins then of course have to be shredded for the following soil preparation and sowing processes. Without mulchers, this would be impossible. Furthermore, we have sowed all tramlines in the pumpkins with clover grass. This helps to avoid deep driving lanes and avoids soiling the roads in bad weather, and it also prevents soil compaction. These clover grass strips are also kept short with the mulcher.

"I can't imagine growing pumpkins without mulchers."

Last but not least, we also mulch all flower strips before re-sowing, as well as field edges, forest tracks and, if necessary, stubble from lodged grain and catch crops. On top of this we get an annual contract job to mulch a fallow field. The mulcher is therefore an integral part of our business. Without mulchers, for example, I couldn't imagine growing pumpkins.

FACTS AND FIGURES

- Market gardening as a sideline according to principles of organic farming (Bioland)
- Family business: Volker and Ute Ligges, children and grandparents also work on the farm
- Up to 20 seasonal workers for the pumpkin harvest and student teachers to lead the carving courses

Main crops: Pumpkins (200 varieties), potatoes, production of winter wheat, winter barley, triticale and broad beans, clover grass and vetch rye for biogas plant (partnership)

Soils:

- Soil value 75-90
- Extremities of Soest Börde/Hellweg soils

Altitude and climate:

- 70 m above sea level
- 750-800 mm/a of precipitation

Use of mulchers at the organic farm:

- MU-M 280 with front/rear headstock

SPECIAL CHARACTERISTICS

- Farming according to Bioland guidelines
- Pumpkin growing
- Direct marketing: Farm shop and Regiomat (24/7)
- Mobile chicken stalls
- Pumpkin carving courses and events
- Partnership with biogas plant (clover grass, vetch rye and chicken manure in exchange for substrate)

WHERE MULCHING IS ESSENTIAL | THE GREEN COUNTRYSIDE OF THE RHÖN

Sebastian Bauer (36) is a passionate grassland farmer. Already in the 3rd generation, the 100% grassland operation in the Rhön region is farmed using state-of-the-art technology.

This traditional farm specialises in suckler cow husbandry and grassland farming. Here in the Rhön, mulching technology has already been in use for 17 years.

"Why we mulch"

"A lot of seeds fly off the aspen and birch trees onto our pastures. We have to eliminate these unwanted plants," reports Sebastian Bauer. Mulching is ideal because the mulch is shredded, depending on the setting. The rotting progresses faster, which in turn promotes the formation of humus. The result is better root growth and firm soil conditions. At the same time, mulching on the pasture is the optimal preparation for the subsequent sowing.

"Our many years of experience have shown," says the farmer, "that the grass growth on the pasture is better and firmer underfoot where we mulch regularly. The growth is more even and the plant health is automatically encouraged."

Mulching in autumn is like a kind of "green fertilisation" for the remaining plants. The difference is clearly visible: Meadows that are mulched grow back more lush - compared with pastures that have not been mulched.



"That's a fact!"

Pastures that are mulched up to 3 times a year can also be grazed up to 3 times a year.

"And that's despite the summer dryness this year!", says an enthusiastic Sebastian Bauer.



" PROBLEMS CAUSED BY ASPEN AND BIRCH TREES ON THE PASTURE ARE EASILY RECTIFIED BY MULCHING."

Sebastian Bauer, grassland farmer in the Rhön region

“ENCROACHMENT OF SHRUBBERY DUE TO THE ADJACENT FOREST IS EFFICIENTLY PREVENTED BY MULCHING.”

Reinhold Bauer, Senior



"A proven tactic over many years"

Mulching has long been the better and only alternative to mowing, as it allows cleaner and faster work. "The results are demonstrably better," says Sebastian Bauer, who has also used disc and rotary mowers in the past. However, these left the material behind and it was in the feed next time. The pasture grass is mown and shredded by a mulcher - in a single operation. Another benefit: Stripes are not formed.

Reinhold Bauer (senior) recalls that the decision was made to use Müthing mulchers "mainly because of the variably adjustable cutting bar". This results in an increased suction effect and at the same time better shredding - even with low growth.

"But I was also impressed by the even distribution of the mulch on the land, without the formation of stripes," adds Sebastian Bauer.

"Mulching down to a height of 7-8 cm is a must!", says Mr. Bauer, because this keeps the grassland in optimal condition for the winter. This process makes use of the winter moisture, so that the first cut in the spring takes place under optimal conditions once again. This is crucial for the whole year and the success of the suckler cow farming.

Grassland that has not been mulched, on the other hand, gets worse and worse over the years. Earnings decline. Shrubbery and unwanted herbs and grasses start to spread. Vermin and mice nest on the pasture, since their natural enemies such as birds of prey can no longer catch them.

Optimal plant composition can no longer be guaranteed.

It is therefore particularly important to re-sow after mulching. This operation is prepared on the Bauer farm with a Müthing mulcher and then carried out with the Vredo direct seed drill. This ensures optimal re-sowing success.

FACTS AND FIGURES

Bauer Farm, Bad Bocklet/Rhön

- Pure grassland farm with suckler cow husbandry
- 90 cows plus offspring
- 120 ha of grassland

Altitude and climate

- 400 - 600 mm/a of precipitation
- Lack of water in spring
- 229 m above sea level

Soils:

- Bunter sandstone, loamy sand, soil value 20-34

Pests: Wild boars, mice **Weed problems:** Dock, thistles, yarrow, lupins, hawthorn, dog rose, spread of aspen and birch seeds on pastures

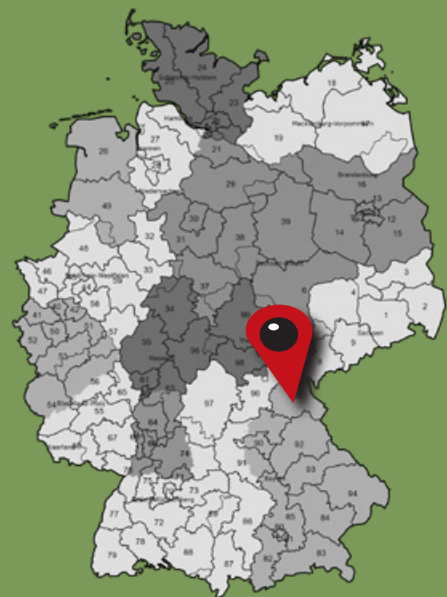
Use of mulchers on grassland

- MU-M 600 for field/pasture care
- MU-M 280 for repair of wild boar damage
- Side mulcher for ditches, embankments and hedges, forest edge maintenance



WE GET RESULTS

Sparneck in the Upper Franconian district of Hof - This is one of 4 sites of AST (Agrar Service Team GmbH & Co. KG) - A contracting company with vision. In our interview Mr. Frank Deistler, one of the shareholders, gives us an insight into his company.



FARMING LARGE AREAS PROFITABLY

A CONTRACTOR'S PERSPECTIVE



Mulchers in the AST fleet :

- MU-PRO/F 860 Vario
- MU-M 280

AST has been successfully offering agricultural services for more than 10 years. The contracting company near Hof - owned by 5 shareholders - covers an area from Leipzig to Plech thanks to its different sites.

Mr. Deistler, do you remember how your company started?

The company was founded on the idea of efficient and economical farming.

And it has worked out: Starting off with a Claas square baler including the corresponding range of services through to today's extensive fleet of equipment, we have been enjoying success for years now. Our offering has expanded rapidly along with the increasing demand and today we offer almost all possible agricultural services and the hire of many different agricultural machines. From sowing to harvesting, our hard-working and competent employees are always at work with an up-to-date fleet of equipment.

What is your typical clientele?

We serve all types of customer groups: from large companies in Saxony and Thuringia to smallholdings in Upper Franconia and Upper Palatinate.

Why did you decide to include mulching in your offering?

In order to profitably increase the utilisation of our equipment fleet, we have been offering mulching as a service for 8 years now. Due to our positive experience and the increasing demand from customers, we took the decision 2 years ago to offer large-area equipment as well. Due to the different climatic conditions, we were able to achieve a utilisation rate of 2000 hectares in just the first year!

Mulching after high-cut grain harvesting and on rapeseed and maize stubble can thus be carried out efficiently, cost-effectively and on time - and these are important factors for our customers. Some of our customers, for example, are now increasingly focusing on high-cut grain harvesting. In addition to extending the very tight harvesting windows and increasing threshing capacity, this method also has advantages for plant cultivation (see info box). For the subsequent soil preparation, stubble and crop residues must then be mulched promptly.

Mr Deistler, how do you - as a contractor - think a large area mulcher needs to be equipped?

On the one hand, it should not take more than a maximum of 20 minutes to mount and lubricate it. Short set-up times reflect directly on our bottom line. We also attach great importance to the user-friendliness and safety of our employees when handling the machines.

On the other hand, the mulcher should enable us to respond to the individual farming requirements of our customers.

Since we often mulch until late November due to the climatic conditions, we need machines that can work trouble-free even under these adverse conditions.

Economical advantages of high-cut grain harvesting:

- Reduction of diesel consumption
- More efficient work due to longer combine harvester operating periods
- Reduction of possible drying costs

Cultivation benefits during subsequent mulching

- Uniform distribution of straw on the land
- Better splicing of the stalks
- Mechanical weed control
- Conservation of water resulting in better germination of weeds and volunteer grain
- Better mixing in of crop residues during the subsequent soil cultivation - resulting in optimised crop management

Due to the numerous advantages and increasing demand, the mulching services sector will expand further in the coming years.

Due to our large area of operation, we often drive on public roads. Our machines must therefore comply with the German vehicle licensing regulations and the technical specifications of the tractor manufacturers.

Mr. Deistler, thank you very much for your time and we wish your company much success!

FACTS AND FIGURES

Year of foundation: 2001

Employees: 20 employees

Services: Square bale baling / wrapping, round bale baling / wrapping, green forage and maize harvesting, soil preparation, sowing, fertilising, mulching

QUALITY TASTES BEST | VEGETABLES ARE OUR PASSION

Gemüsebau Mählmann from Cappeln grows a total of 30 different varieties of field vegetables. We talked to Jan Nikolas Pille about growing methods.

Mr. Pille, what goals are you pursuing when you mulch before cropping?

We supply the fresh market and the food retail trade with very high-quality vegetables. The high quality standards mean

that vegetables need to be brought to market without being affected by diseases and pests. It is very important for us to take advantage of all possibilities for reducing diseases and pests as early as the preparation phase.

"As a large producer of cabbages, we cannot do without mulching in terms of field hygiene!"

The shredding of the crop residues reduces pests and diseases on the one hand, and, on the other hand, improves mixing during soil preparation and the rotting process. In vegetable growing, ploughing is essential for every crop because the land is typically used for multiple crops and you want to avoid infecting the subsequent crop with diseases.



Does this also allow you to use less pesticide?

Consumers today attach great importance to sustainability and environmentally friendly farming. We therefore use pesticides only to the extent necessary and make full use of other farming techniques. On our land, we carry out both mechanical weed control with sensor-controlled hoes and manual





Teamwork at Gemüsebau Mählmann

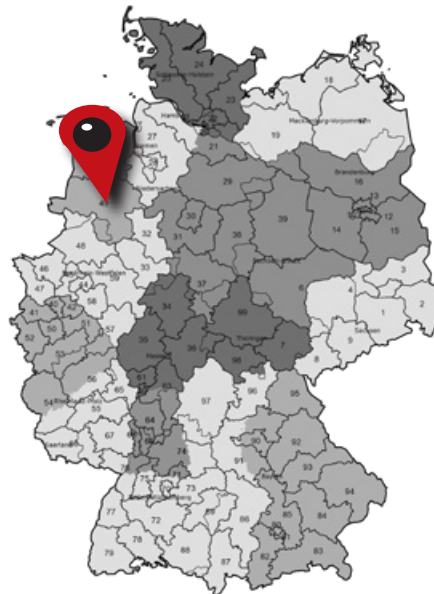
"Mulching is part of a system that allows us to avoid using a total herbicide in catch crop cultivation!"

weeding.

In winter, all of our fields are covered with green rye or clover grass. This growth is not harvested, but instead worked into the soil to build up humus. In order to be able to avoid using a total herbicide here, we first mulch this growth and then work the shredded residues flat into the surface.

Which mulchers do you use on your farm?

We have various mulchers in use. Most crops are grown in beds or rows and cultivated in a system between 15.2 and 16.4 metres wide. The 8.60 metre wide butterfly combination is the perfect solution here, because one bed can be processed with two passes. In addition, we have a 6 metre wide rear mulcher for the field crops. For the harvesting and maintenance tracks we have a 2.80 metre wide mulcher at the front and a subsoiler at the rear. Field edges, ditches and access tracks are kept clear with a side mulcher.



What experience have you had so far with mulchers?

The use of mulchers is indispensable for the farm and the result meets our expectations of appropriate preparation of the land. The rotting process is much faster, which is especially important for fast-growing crops. Every day counts when cultivating areas with multiple crops.

The bottom line is that the overall system of various work steps must fit together well and here the mulcher is a component that helps us to deliver the expected quality of vegetables.

FACTS AND FIGURES

**Gemüsebau Mählmann
Siehenfelde, Oldenburg
Münsterland**

Farm data:

- Approx. 90 employees
- Approx. 800 harvesting staff
- Fully self-sufficient in machinery

Main crops:

- 30 varieties of field vegetables, from cauliflower, bok choy and Romanesco broccoli to savoy cabbage
- Winter wheat
- Catch crops and winter vegetation with clover grass and green rye

Soils:

- Ave. soil value 45 from sand to clayey loam

Altitude and climate

- 40-60 m above sea level, 700 mm/a of precipitation

Use of mulchers in vegetable growing:

- MU-PRO/F 860 Vario for the beet crops
- MU-M/F 600 Vario for field crops
- MU-Farmer 280 Front for the tramlines in combination with a subsoiler
- Side mulchers for ditches and field edges
- MU-M/S 180, rear mounted



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