



ullmanna

AI agriculture



NEWMAN

DISCOVER THE FASTEST AND
BEST AI IN-ROW CULTIVATOR

SAVE UP TO 90%
ON WEEDING COSTS



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The revolution in In-Row Weeding - fast, easy and reliable

Our cultivator **NEWMAN** works
for nearly all crops



Sugar Beets, Pumpkins, Corn, Onions,
Garlic and many more...



A 6-row machine can replace
up to 60 hand workers



Reduce your weeding costs up to 90%



For 6-row sugar beets speeds up to 5 km/h
and 1 ha/h are possible, for pumpkins up to 8 km/h



The system can learn new crops
within some hours



Working 24/7 – in every sun altitude



Our advanced AI technology is a ready to go solution, works in any circumstances, for any size, easy to adapt and for every farmer and almost every crop around the world.

Even big amounts of weeds on “bad” fields are no problem.



No need for calibrations



No need for extensive setup



Sit on your tractor and weed in nearly any crop



It just works!

BUILT BY FARMERS
FOR FARMERS,
WITH PROVEN RESULTS.

HOW IT WORKS?



1.

Camera detects the crop and the flashlights provide consistent light for best recognition



2.

AI sees multiple pictures of one plant and calculates about 5-6 times if it is a plant or not



3.

If it is a plant:
Knives open



4.

Knives close

What sets our system apart is the unique combination of next-generation AI, machine vision, and agricultural expertise, all complemented by a practical setup.



We **detect the roots** rather than the leaves, making wind a non-issue and allowing us to remove weeds underneath the leaves.



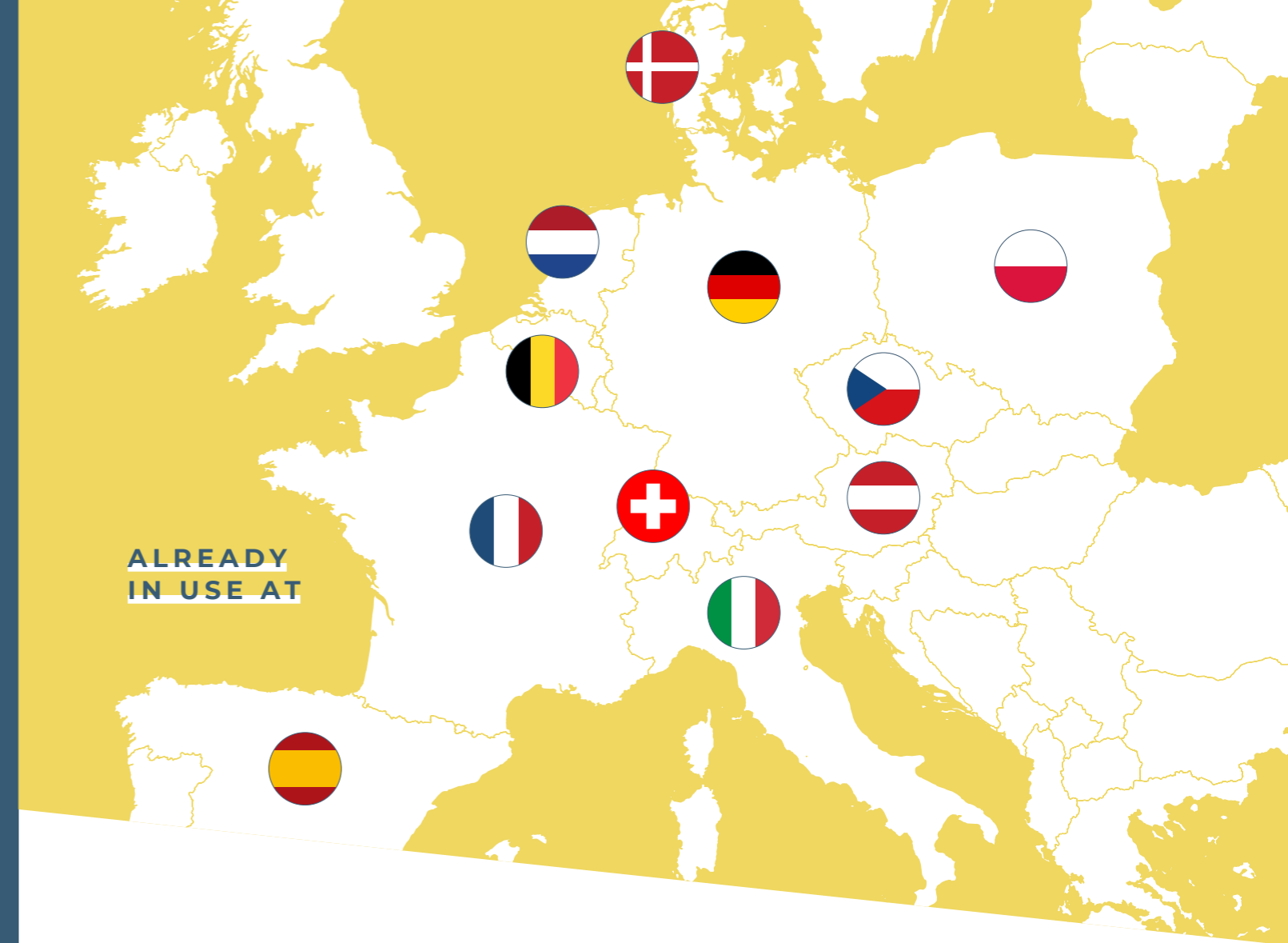
Our system can handle **all types of sun altitudes**.



We can begin weeding at an **early stage** (with just two terminating leaves).



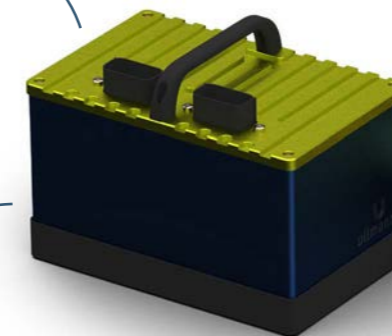
Our recognition and processing speeds are very fast, even for intra-row sugar beets (**up to 5 km/h**)



Our AROW Box!

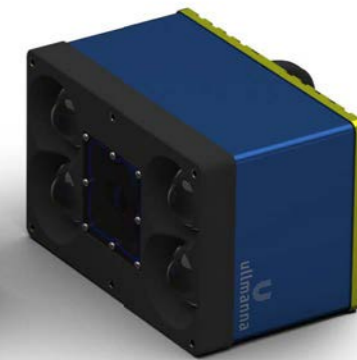
THE „HEART“ OF OUR WEEDER

Industry proofed materials



a **ready to go solution**, which contains all the necessary parts - Lights, Camera, Computer, AI, Control

Easy to adapt to your weeder or any other machine



Full support and consulting by Ullmann

What can AI do for famers?

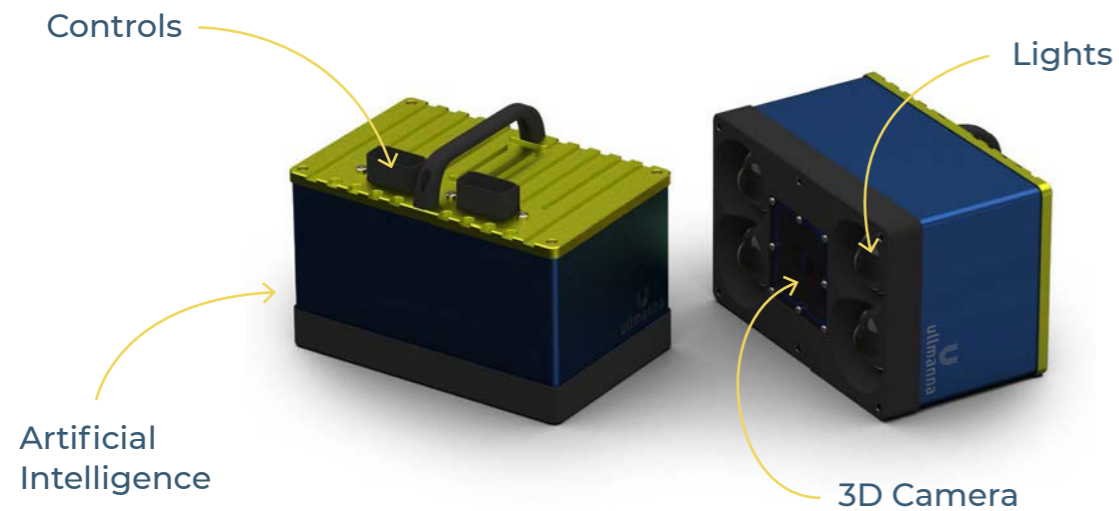
**SAVE UP TO 90%
OF YOUR
WEEDING COSTS!**

Boost Your Yield and Lower Costs with
Ullmanna's Sustainable AI Solution.

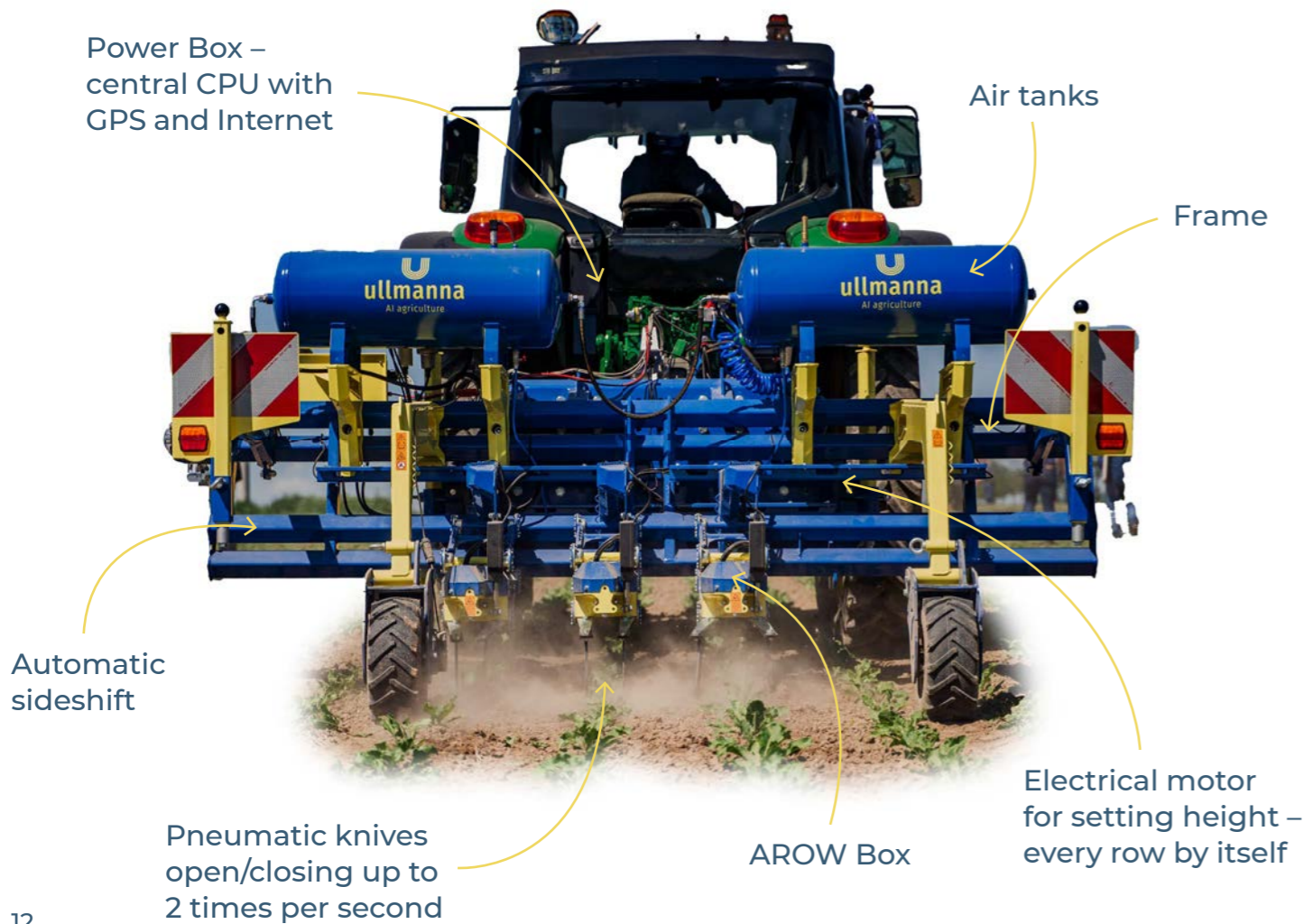
- 99% Recognition of plants within weeds (even for „bad“ looking fields)
- Cultivation possible starting from 2 germinating leaves
- Independent of crop, in-row distance starting at roughly 8 cm possible
- More than hundreds of hectares already done
- Side wind is not an issue - we steer based on the root part of the plant
- Day or Night - due to our lighting even different sun angles are no problem
- No need for any calibration - it works out of the box
- Every tractor driver can work with our system
- Up to 15 km/h tractor speed
- Works on nearly all crops (Corn, Sugar Beets, Pumpkins, ...)
- No ground contamination - no chemicals
- 3x time more profit
- Nearly no manual labor necessary!
- Sustainable solution for future growth

KEY ELEMENTS OF THE WEEDER

THE AROW BOX



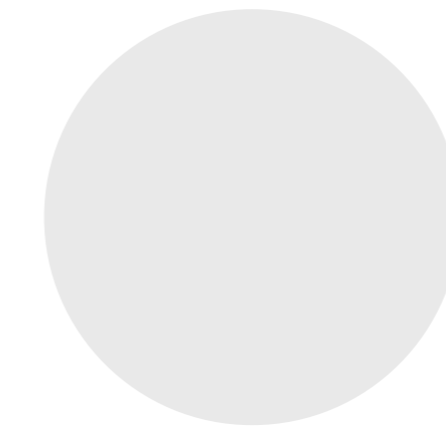
THE CULTIVATOR



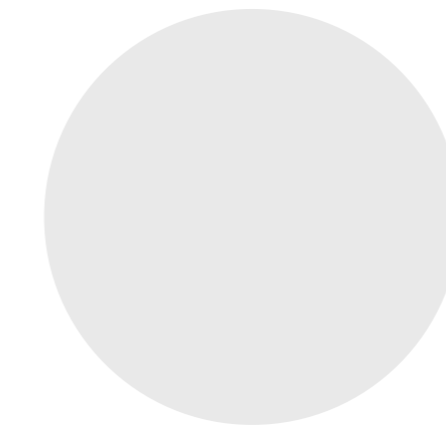
VARIATIONS:

- From **1 – 16 rows** everything is possible
- In-Row distance **at least 8 cm** between the crops
- Distance between rows roughly **min 30 cm**

KNIVES VARIATION:



Low with 1 cm x 1 cm x 1 cm



High with 2 cm x 2 cm x 2 cm

HANDLING:

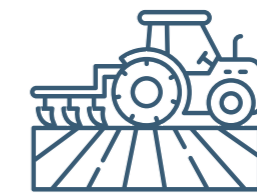
Our system is very easy to handle.

With every machine comes a tablet, which is connected via WIFI to the Powerbox.

In the tablet the current status of every box and the total machine can be seen.

After selecting the crop you can set the height, when the knives should open and close and you are ready to go.

The tablet and the machine gets the latest update via Internet and are always up to date.



TRACTOR REQUIREMENTS:

- One hydraulic connector for sideshift
- KAT2 3-way-connector
- Standard Brake Lights Connector
- ISO Bus or direct connection to Battery for power
- GPS steering on the tractor would be good but not necessary

Contact us for your individual offer

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WE HAVE ALREADY WORKED ON A LOT OF DIFFERENT CROPS AND CAN LEARN NEW CROPS WITHIN SOME HOURS



SUGAR



CORN



PUMPKIN



ONION



GARLIC



PEANUT



RICE

AND MANY MORE...

How does our system learn new crops?



8:00 am

am Machine drives over the new crop and takes pictures



9:00 am

Automatic upload of picture



10:00 am

Tell the system where are crops



12:00 am

System updates model



2:00 pm

Full speed ahead! Automatic updated the machine can work now in the new crop

Key Advantages

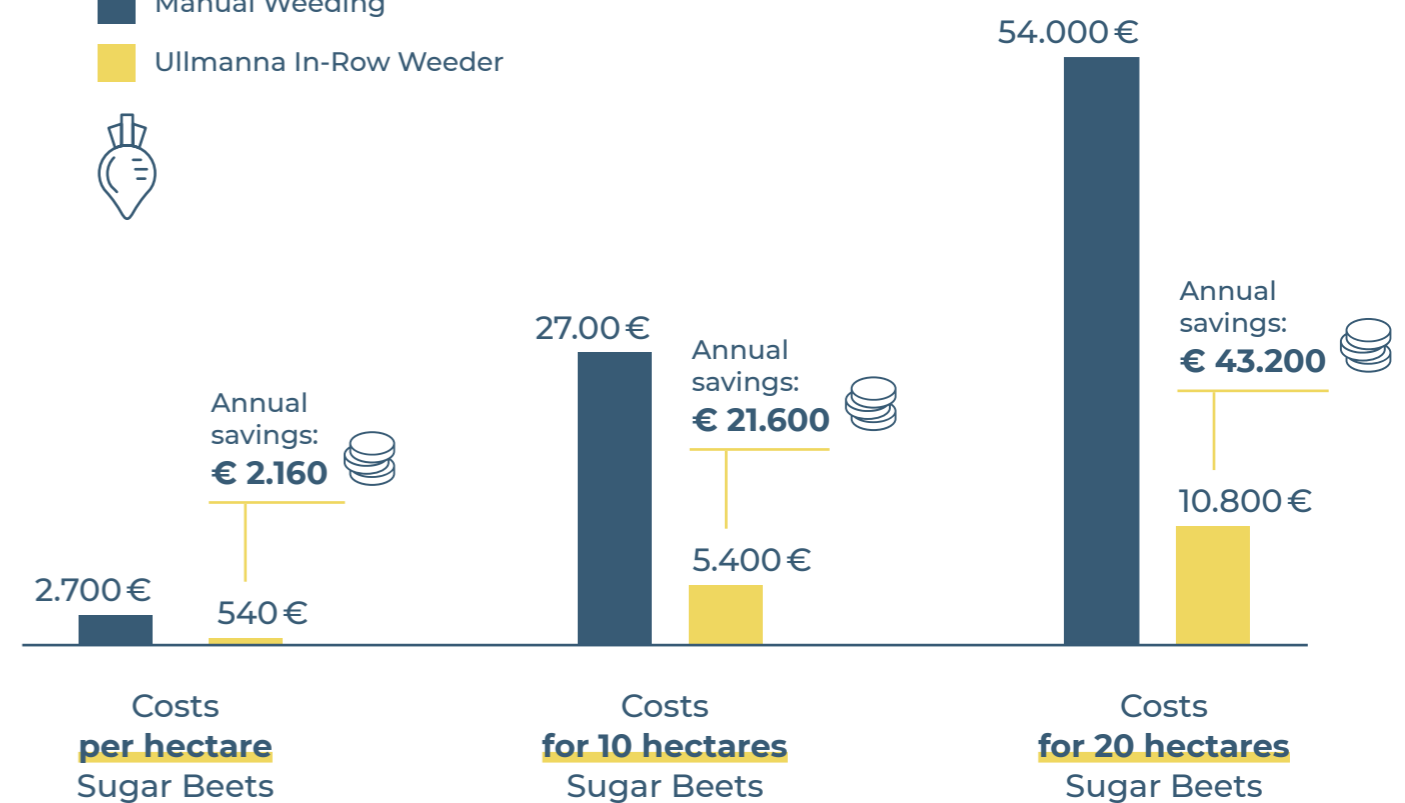
HIGH COSTS OF MANUAL WEEDING

Manual weeding is **labor-intensive and expensive**. In Austria and Germany, a hand-weeding worker costs approximately **€15 per hour**, including all expenses. For organic sugar beets, one worker requires about 180 hours per hectare.

The **Ullmanna In-Row Weeder** offers an impressive **80% savings** on weeding costs (we even have 100% of savings, but let us keep it simple).

Manual Weeding

Ullmanna In-Row Weeder



Very roughly, you can say that one 6-row machine **replaces up to 60 workers**.

BTW:

Every machine learns from every other machine, and the updates get always distributed via Internet.

So our AI recognition gets better and better with every plant



About us

A TECH COMPANY ADDRESSING THE WEEDING CHALLENGE WITH A UNIQUELYBALANCED APPROACH OF TECH AND AGRICULTURAL TRADITIONS.

OUR MISSION

At Ullmanna, we are revolutionizing agriculture by integrating cutting-edge artificial intelligence with practical farming techniques. Our mission is to enhance agricultural efficiency, sustainability, and productivity through advanced AI-driven solutions.

NEWMAN

Our flagship product, NEWMAN, exemplifies our commitment to innovation. This AI-powered weeding machine leverages sophisticated algorithms and machine learning to precisely identify and eliminate weeds, significantly reducing the need for manual labor and chemical herbicides. By targeting weeds accurately, NEWMAN promotes healthier crop growth and enhances soil fertility, aligning with global sustainability goals.



Our ambition is to develop the most efficient and the fastest intra-row weeding technology in the world.



OUR SYSTEM

Developed with real-world farming challenges in mind, our technology is robust, adaptable, and scalable. It works seamlessly with various types of farming equipment and is effective across different crops and field conditions. Our system is easy to use, requiring no calibration and functioning efficiently day or night, under varying weather conditions.

ULLMANNA

Founded by Martin Ullmann, a former IT expert for the Czech army, and his relative Jindrich Ullmann, an experienced agronomist, Ullmanna combines expertise in technology and agriculture to address the pressing needs of modern farming. Our AI solutions have been extensively tested and are already making a significant impact on farms across Europe.

SUPPORT

- We offer full support in every country either by us or by one of our partners.
- Remote Support anywhere possible.
- 24/7 Support Hotline during main weeding times.





**Join us in our journey to make
agriculture more efficient,
sustainable, and future-proof.**

**With Ullmanna,
the future of farming is here.**

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Ullmanna Austria – Raggendorf, Austria**

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and Facebook!