

DRONE TEST TO IMPROVE SORGHUM POLLINATION







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General Director



- AGROSZEMEK Kft.(Ltd.) was founded in the year 1990, it is located in Hungary
- More than 30 years knowledge in case of Sorghum







AGROSZEMEK MAIN ACTIVITIES

- Sorghum seeds production
- Breeding
- Demo trials, plant protection trials
- Advisement of Sorghum's cultivation technology to our partners
- Sorghum plant portecion consultancy with our clients







THE REASON WHY WE USE DRONE

Windlessness: There is no wind during the flowering time and hot weather condition

Increasing yields: pollen pressure is extended (e.g female's middle rows)











DRONE

Type: TTA M6E-1 Agriculture sparying Drone

6 pcs rotors

Diameter: 1400 mm



Performance: approx. 2 hectares

with



1 battery/flight

Flying without spraying, we need only the turbulence







DRONE MAKES HUGE TURBULENCE











SETTING THE DRONE'S PARAMETERS

- Height: over the plants 1,5 m
- Speed: 4-5 m/sec
- Setting the AB point (straight) of the male line
- Setting the line spacing (swath): calibrating the distance between male lines:
 4,5-5 meter (ratio 8:2, row distance: 45 cm)









TASK ADJUSTMENT 1 (SET CORNERS)

- Adjust the corners of the area
- Use map point or phone dots (not so precise)



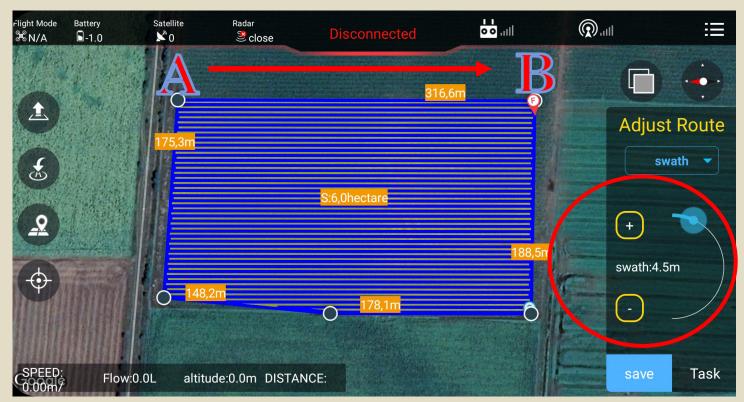






TASK ADJUSTMENT 2 (AB POINT)

- Much more precise(Drone's GPS)
- Straight above the male line



Hovering with Drone → Set A (start) point above the male line line and Set B (finish) point
 Left or right direction

→ Fly till the end of this m





FLYING ABOVE THE MALE LINES









RESULTS

(IN SEEDS PRODUCTION)

- Safer grain fixing in the panicles(windlessness, hot weather condition)
- + 10-15% yield increasing









HARVESTING SEEDS PRODUCTION 2021





