

Parrot[®]

PROFESSIONAL

OPTIMIZATION OF CROPS PROJECT

FIND THE BEST FERTILIZER TO OPTIMIZE YOUR CROPS
USING PARROT DISCO-PRO AG



- Luke Skerman is a farmer who wanted to optimize the usage of fertilizer on his crops.
- After a drought, a time and money saving solution was needed for Luke to save his crops.
- Parrot Disco-Pro AG is a safe and cost-effective method that let Luke test different fertilizers on his crops and analyze their effectiveness.

Luke Skerman is an Australian farmer who grows chickpeas. There had been a recent drought and it was necessary for Luke to find a fertilizer or a mix of several that would help the health of his crops. His fields are large and vary between 50 and 100 hectares, which is why he needed a fast and safe method to analyze the impact of fertilizer on his crops.

"Parrot Disco-Pro AG is an extremely efficient solution that allowed me to test and analyze the effects of fertilizers on my crops. With the NDVI maps I was quickly able to see which combination of fertilizers worked the best."

LUKE SKERMAN, FARMER



After a drought it is fundamental for farmers to choose the best fertilizer to save their crops

Farmers find it difficult to quickly and efficiently check the health of their crops. They also find it equally difficult to get smart data on the soil they plant their crops in. Most solutions were limited, for example satellite images were not very good quality and data analysis took a long time.

On 6th June 2017, Luke planted chickpeas; his fields needed a large quantity of fertilizer due to a drought. This prompted him to opt for drone solution, Parrot Disco-Pro AG to compare the efficiency of the different types of fertilizer on separate areas of his crops. He used 3 fertilizers in varied quantities on two kinds of chickpeas.

Use an autonomous drone flight to crop map fields with precision

Luke executed an autonomous flight on 29th September 2017, the field he wanted to analyze measured 77 hectares. The fixed wing drone flew for about 30 minutes over the field at an altitude of 110 meters. Thanks to the app, Pix4Dcapture, Luke planned the flight to map the exact area he wanted to analyze.

Parrot Sequoia (composed of a multispectral sensor and a sunshine sensor) captures the light reflected by plants and the daylight, enabling an analysis on the health of crops. The sensors capture precise photos using varied wavelengths so they can create an NDVI map of the plots under observation.





Analyze crops with ease using an efficient drone solution and NDVI mapping

The map created using Pix4Dag enables you to quickly analyze the effectiveness of the different fertilizers sprinkled on the chickpeas, thanks to the specific color coding. You can see that the fertilizer used in zones 3 and 4 is more efficient than the one used in zones 1 and 5, which seem to be suffering (colored red on the map). Thus Luke decided to maintain 3 fertilizers (A, B and C) on all future chickpea crops.

Improve the productivity of your fields using a drone

This Parrot Professional solution is a simple and efficient means of obtaining reliable data. Luke feels that the Pix4Dag software is very resourceful, "the ability to process the data on my own computer is a great asset."

Parrot Disco-Pro AG gives you the possibility of observing large fields and obtaining images of excellent resolution. It also enables you to improve the productivity of your fields and your yields, all the while saving money.