
Use of Ultra-Light Uav Drones in Agriculture: Analys , Monitoring and Control.

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Practical Use of Uav Crop Dusting

UAV-based solutions allow to apply pesticides to a problematic region instead of dust cropping the whole field - automated NDVI data collection allows for precision. NDVI data collection helps to monitor crops health.

Naturally, this results in savings on pesticides and other agrichemical solutions - 30%-40% of agrichemical solution usage reduction when compared to traditional methods.

Practical Use of Ndvi and Known Issues

NDVI method allows to evaluate plant health level. The method is based on study of light absorption and reflection in red and UV specters.

The main drawback in using NDVI method is caused by the lack of proper data collection and analysis methods.

NDVI is heavily influenced by outside factors, such as humidity, lighting, etc.

Ways to resolve the abovementioned issue are currently developed by our company jointly with Russia's leading agrochemical and chemical research institutes (creation of methods, additional sensors development, active laser diagnostic, etc.)

Conclusion

Systems with UAVs can be very useful in agriculture industry. Although today this technology has some issues. AgroDroneGroup technology is aimed to reduce the issues and make UAVs more useful for agriculture.