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**REMOTE SENSING METHOD  
FOR MONITORING FOREST AREAS**

**Veselina Gospodinova, Aleksandre Kandilarov (BG)**

**SUMMARY**

Two mapping surveys over a mixed coniferous and deciduous forest northwest of Kalofer, Bulgaria were conducted one year apart using a drone equipped with a multispectral camera. The main aim was to identify and monitor areas infested and damaged by bark beetle. This report demonstrates that, for small areas, properly equipped unmanned aerial vehicles are an economically viable alternative to more conventional remote sensing methods such as manned airborne surveys and satellite imagery. The results also show that UAV-based multispectral imaging may be used for early detection and precise delineation of infested zones. This can help in taking timely preventive measures for limiting the aerial extent of the infestations and eliminating them.

**Key words:** UAV, Photogrammetry, Vegetation Index, Forest Disturbance, Monitoring

**AUTHORS:**

**Assis. Prof. Dr. Eng. Veselina Gospodinova,**  
University of Mining and Geology „St. Ivan Rilski”  
e-mail: [veselina\\_gospodinova80@abv.bg](mailto:veselina_gospodinova80@abv.bg)

**Aleksandre Kandilarov PhD,**  
Neopteryx LLC  
[akandilarov@neopteryx.org](mailto:akandilarov@neopteryx.org),