

WP 5.1 - SAFE EUROPEAN FRUIT FROM A HEALTHY ENVIRONMENT

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OBJECTIVES	
<ol style="list-style-type: none"> 1. To develop a Crop Identification System (CIS) for adjusting the pesticide application equipment to the target characteristics as an integral component of a novel pesticide application system. 2. To develop a Crop Health Sensor (CHS) for the on field identification of the tree health status as an integral component of a novel pesticide application system. 3. To develop an Environmentally Dependent Application System (EDAS) for adjusting the pesticed application equipment according to the environmental circumstances an integral component of a novel pesticide application system. 4. To coordinate the development of the CIS, CHS and EDAS, validate their effects and integrate them into novel system. 5. To develop a model for the prediction of nutrient demand rates of orchards needed for top quality fruit. 6. To develop site-specific,highly efficient fertilizer application methods to achieve top quality fruit and minimized nutrient losses. 7. To optimize tree nutrition in organic fruit production to achieve top quality fruit while increasing the efficient use of nutrients and improving tree performance. 	

TASKS

Task 5.1.1 Development of a Crop Identification System (CIS) to adjust spray application to the target characteristics.

Task 5.1.2 Development of a Crop Health Sensor (CHS) for identification of tree health status determining pesticide application.

Task 5.1.3 Development of Environmentally Dependent Application System (EDAS) for adjusting the spraying equipment according to the environmental circumstances.

Task 5.1.4 Evaluation of the effects of the crop adapted spray applications techniques.

Task 5.1.5 Development of a model for the prediction of nutrient demand rates.

Task 5.1.6 Development of site-specific fertilizer application methods for minimized nutrient loss.

Task 5.1.7 Optimizing tree nutrition in organic fruit production to achieve top quality fruit while increasing the efficient use of nutrients and improving tree performance