



Environmental investigations and researches for enhance the low-input management practices in Diverfarming* project

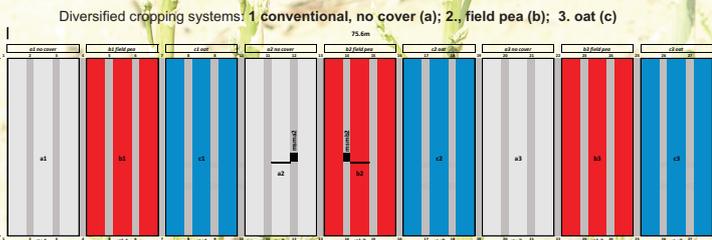


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This poster presents the scientific investigations of asparagus crop at Jakabszállás and vineyard in Villány as case study areas of H2020 Diverfarming* project, Hungary. The case study No. 10 experimental plot of 1.3 ha with 28 rows of asparagus located at Jakabszállás – Danube -Tisza Interfluve (Hungary). The case study No. 11 located in Villány, on loess-covered area the southern slope of Fekete-hill. Among the managing practices (cs10) are the foil coverage, crop rotation, mineral fertilizer and integrated pest management. The main environmental problems at Jakabszállás are wind erosion and drought hazard, lack of ground cover, poor soil quality, low soil organic matter content and water scarcity. At vineyard area, where organic farming method was introduced, loss of biodiversity, wheeltrack erosion, soil compaction. In the period 2018-21 the experimental management practices focus on the crop diversification, low-input land use such as intercrop in lines (*Achillea millefolium*), OM sequestration methods, etc.



Environmental problems:
 drought,
 wind erosion

Low input management practices:
 controlled irrigation,
 use granulated organic substances ("greensoil")
 integrated pest management



Preparing Asparagus rows (March-April)



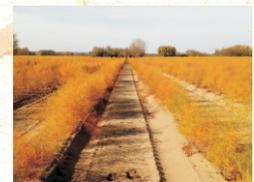
Harvest (April-June)



1st manuring, rotation (June)



2nd manuring (August)



using decomposing bacteria (Oct.-Dec.)



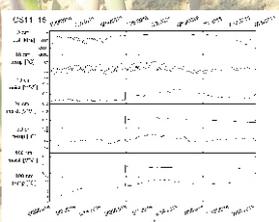
Grass covered interline



Yarrow as intercrop



Mulching



Water budget time series



In situ cameras



Camera record on conventional method



Preparing chambers for GHG sampling



Soil water budget monitoring



***Crop diversification and low-input farming across Europe: from practitioners' engagement and ecosystems services to increased revenues and value chain organisation**