TRANSFARM 4.0

Deliverable D.C.5.3

Model Farm Demonstration Days

Version 1
06 2022

Giuseppe Saija

Sommario

1. Executive Summary

The consortium approach to the organisation of Model Farm Demonstration events has been geared towards maximising opportunities deriving by complementary events planned or participated by project partners on a regional basis. Taking into account the high density of events attracting farmers at regional level, the idea was to set up activities that could nicely integrate those events and facilitate farmers' access to the innovations proposed by TRANSFARM. Needless to say, the Covid pandemics has had a significant impact on the activity, since it reduced the number of opportunities both in 2020 and 2021.

Nonetheless, the partners managed to organise several showcase opportunities based in particular on the work being done in the pilot actions. The key events targeted were therefore the Vite in Campo (a large national Italian even focused on vineyards) which offered the opportunity to showcase the solutions engineered for the variable rate spraying in Pilot Action 2 also with the participation of partners from Slovenia, an ad-hoc event co-organised by partner MATE together with the Mikóczy Family Estate winery in Hungary, focusing on solutions designed within Pilot Action 3, and the Farm Innovation Days in Austria, with demo activities related to Pilot Action 1 on the Isobus protocol.

In total 4 events were organised attracting between 400 and 500 participants to the demonstration sessions.

2. Model Farm Demonstration Days in Italy

In Italy CREA organised the TRANSFARM Demonstration Days within the framework of Vite in Campo (Vineyard in the field), held on the 23rd and 24th July 2021 in Susegana, Veneto region. Transfarm 4.0 was presented to the public and a field demonstration of the pilot action remote and proximal sensing took place. The demonstration activities were attended by a bit more than 100 people, mostly farmers and representatives of the machinery business setor.

The exhibition was a great occasion to present the protoype to the public during the "carosello" (a showcase), a presentation where together with other industries Crea presented and described the features of the machine developed during the project in front of a specialistic audience, composed mostly of farmers.

The event saw the participation of Maschio Gaspardo, an agricultural machinery company involved also in the Pilot Action 2 with the adaptation of one of its sprayers to perform variable rate treatment and of Slovenian partner UM, who had played a major role in the engineering of

the solution. This was the object of the in field demonstrations foresee in Day 1 and 2. Luca Masiero from CREA and Jurij Rakun from the University of Maribor provided insights on the activities and outcomes of TRANSFARM in the Day 1 workshop on Agriculture 4.0.

Below, the two days programme and the picture of the Pilot Action 2 sprayer delivery in Susegana.

Programma

Venerdì 23 luglio 2021

- ore 9:30 – Convegno "La sinergia tra la Regione Veneto e il CREA per la sostenibilità: viticoltura a basso impatto ambientale", presso la Sala conferenze CREA in Via Casoni 13 a Susegana. Scopri di più
- ore 11:00 – Presentazione cantieri innovativi con carosello, presso centro aziendale Azienda Agricola Conte Collalto
- ore 14:00 – Dimostrazioni in campo
- ore 18:30 – Workshop "Agricoltura 4.0: come non perdere le agevolazioni fiscali", presso l'area dimostrativa
  Relatore: Alberto Rocchi, dottore commercialista revisore contabile
  Moderatore: Antonio Boschetti, L'Informatore Agrario

Sabato 24 luglio 2021

- ore 8:00 – Dimostrazioni in campo
- ore 10:00 – Inizio Tour guidato delle innovazioni in campo
- ore 13:00 – Chiusura della manifestazione

3. Model Farm Demonstration Days in Hungary

Precision farming open innovation week and Model farm demonstration days were organized in the 2021 and 2022 by the MATE (PP6) to show the possible PA solutions in viticulture. We invited growers, both university and high-school students, teachers. Field demonstrations were organized on the 21st of September 2021, and on the 13th of May 2022, for a total attendance of about 70 people, mostly from the wine sector.

During the programs owner of the Mikóczy and Mikóczy Family Estate introduced the vineyard the solutions for the irrigation of the plantations. Zsuzsanna Varga detailed the effect of the terroir on the viti-vinicultural sector. Dóra Taranyi introduced the effect of the irrigation on the yield and quality of the grapevine. Gyula Váradi the external expert of the Transfarm4.0 introduced the sensor network which give the basis of the Case Study 3.

4. Model Farm Demonstration Days in Austria

FJ organised the Transfarm4.0 ISOBUS Pilot Action Demonstration at the Innovation Farm DAYS 2022, between the 7th and the 10th of June 2022.

The event attracted a total of 352 people, 100 of which representing SMEs in the agricultural sector, 100 from research or innovation institutes and 150 students from high schools, vocational training centres and universities. The Innovation Farm Days provided a participants with very concrete opportunities to witness the functioning of innovations in the field of precision agriculture. To this purpose, a four hectare "Field of Innovations" was made available for demonstrations of machinery, implements and technologies, including sowing, fertilization, crop protection and field robotics.

Mittwoch, 08. Juni 2022	
Ankunft & Registrierung	07:35
Begrüßung & Wechsel zu den Themenbereichen der Innovation Farm	07:50 - 08:00
Präsentation der Innovationen von morgen	08:00 - 10:40
Pause	10:40 - 11:00
Wechsel zur Feldvorführung	11:00 - 11:15
Feldvorführung zum mechanischen Pflanzenschutz - Klasse LWa18 „FJ vs. Unkraut“	11:15 - 12:30
Mittagspause / voraussichtliches Ende	12:30

Themenbereiche

- **Innovationen und smarte Lösungen**
  - **... im Ackerbau**
    - Bodenzonierung, Bodenbearbeitung, Saatbettbereitung und Saat für eine standortangepasste Bewirtschaftung (Transfarm4.0 Pilot Action „Seedbed Control“)
    - Anwendungen für eine bedarfsgerechte und effiziente Düngung
    - Innovationen für einen nachhaltigen und zielgerichteten Pflanzenschutz (Präzise Hacktechnik)
    - Auswirkungen der unterschiedlichen Anwendungen und Versuchsvarianten (Düngung & Pflanzenschutz) auf die Pflanzenentwicklung und das Ertragspotential (Raps, Weizen, Mais, Gerste)
    - Assistenzsysteme für eine intelligente und effiziente Feldarbeit und Ernte
    - Feldrobotik
  - **... im Grünland**
    - Lösungen für eine ressourcenschonende und smarte Grünlandverfahrenskette
  - **... in der Hof- und Innenwirtschaft**
    - Automation und Robotik in der Hof- und Innenwirtschaft
    - Tierindividuelle Monitoringsysteme in der Milchproduktion
- **Fachliche Vertiefung zu ausgewählten Themenbereichen**
- **Feldvorführung zum mechanischen Pflanzenschutz (Mittwoch & Donnerstag)**

Donnerstag, 09. Juni 2022	
Ankunft & Registrierung	08:45
Begrüßung & Wechsel zu den Themenbereichen der Innovation Farm	09:05 - 09:20
Präsentation der Innovationen von morgen	09:20 - 12:40
Mittagspause	12:40 - 14:00
Wechsel zur Feldvorführung	14:00 - 14:15
Feldvorführung zum mechanischen Pflanzenschutz - Klasse LWa18 „FJ vs. Unkraut“	14:15 - 15:30
Fachliche Vertiefung zu ausgewählten Themenbereichen	optional im Anschluss
Get together	

Themenbereiche

- **Innovationen und smarte Lösungen**
  - **... im Ackerbau**
    - Bodenzonierung, Bodenbearbeitung, Saatbettbereitung und Saat für eine standortangepasste Bewirtschaftung (Transfarm4.0 Pilot Action „Seedbed Control“)
    - Anwendungen für eine bedarfsgerechte und effiziente Düngung
    - Innovationen für einen nachhaltigen und zielgerichteten Pflanzenschutz (Präzise Hacktechnik)
    - Auswirkungen der unterschiedlichen Anwendungen und Versuchsvarianten (Düngung & Pflanzenschutz) auf die Pflanzenentwicklung und das Ertragspotential (Raps, Weizen, Mais, Gerste)
    - Assistenzsysteme für eine intelligente und effiziente Feldarbeit und Ernte
    - Feldrobotik
  - **... im Grünland**
    - Lösungen für eine ressourcenschonende und smarte Grünlandverfahrenskette
  - **... in der Hof- und Innenwirtschaft**
    - Automation und Robotik in der Hof- und Innenwirtschaft
    - Tierindividuelle Monitoringsysteme in der Milchproduktion
- **Fachliche Vertiefung zu ausgewählten Themenbereichen**
- **Feldvorführung zum mechanischen Pflanzenschutz (Mittwoch & Donnerstag)**