



CYCLE	XL
STUDENT	FRANCESCO CIAVARELLA
TUTOR	Zina Flagella
CO-TUTOR	Michele Rinaldi (CREA-CI)

CURRICULUM	1 Sustainable Agriculture, Natural Resources and Biodiversity
PROVISIONAL TITLE of the RESEARCH PROJECT	Effect of regenerative agriculture practices on the sustainability of a cereal cropping system in a Mediterranean area.
DOCTORAL SCHOLARSHIP	ATENEO
SHORT CV	<p>Master's Degree in Agricultural Sciences and Technologies (LM-69), University of Foggia. I am currently a PhD student (XL cycle) engaged in research activities focusing on the application of remote sensing and smart technologies for sustainable crop and water management, with a particular interest in regenerative agriculture and soil health improvement.</p> <p>I previously worked as a research fellow at the CREA – Cereal and Industrial Crop Research Centre in Foggia on Italian Space Agency (ASI)-funded projects <i>SARAGRI and TETI</i>, dealing with data collection, processing, and analysis of soil-plant systems and irrigation requirements.</p>
PUBLICATIONS	<ol style="list-style-type: none"> Ciavarella, F., De Santis, M.A, Manganiello, C., Flagella, Z., Rinaldi, M., 2025. A multi-source approach to evaluate a long-term experiment on Conservation Agriculture. Proceedings of the 54th Conference of the Italian Society of Agronomy. ISBN 978-88-908499-8-5, Torino, Italy, 17th-19st September 2025, 85-86. De Santis, M.A., Ciavarella, F., Flagella, Z., Rinaldi, M., 2025. Adaptability of durum wheat genotypes to conservation agriculture: results from a seven-year field trial. Proceedings of the 54th Conference of the Italian Society of Agronomy. ISBN 978-88-908499-8-5, Torino, Italy, 17th-19st September 2025, 45-46. Rinaldi, M., Ruggieri, S., Garofalo, P., Ciavarella, F., Satalino, G., Mattia, F., Balenzano, A., 2025. An innovative decision support system for early estimation of district irrigation needs of processing tomatoes. Proceedings of the 54th Conference of the Italian Society of Agronomy. ISBN 978-88-908499-8-5, Torino, Italy, 17th-19st September 2025



4. Rinaldi, M., Ruggieri, S., Garofalo, P., Musti, L., **Ciavarella, F.**, Satalino G., Mattia, F., Balenzano, A., Lovergine, F., Albertini, C., Palmisano, D., Iacobellis, V., Gioia, A., Lombardo, M., Martellotta, A. M. N., Impedovo, V., Sarcinella, L., Veneto, D., Gattulli, V., Nardella, L., Di Cataldo, M., Noviello, N., Guarini, R., Sacco, P., Virelli, M., Tapete, D. (2025). Estimation of Irrigation Needs by Monitoring Crop Rotations and Phenology of Tomato in Southern Italy. EGU General Assembly 2025, 27 April - 2 May 2025, Vienna, Austria.
Doi: <https://doi.org/10.5194/egusphere-egu25-11983>
5. Balenzano, A., Mattia, F., Satalino, G., Palmisano, D., Lovergine, FP., Oswald, S.E. , Schrön, M., Baroni, G., Emamalizadeh, S., Kjeldsen, H., Klahn, EA., Rinaldi, M., **Ciavarella, F.**, Zboril, M., 2025. Metrology for Multi-Scale Soil Moisture Monitoring (SoMMet) and High-Resolution Earth Observation Validation. EGU General Assembly 2025, 27 April–2 May 2025, Vienna, Austria.
Doi: <https://doi.org/10.5194/egusphere-egu25-13440>