Dear Colleagues,

We have the pleasure to inform you that the call for abstracts to the EGU 2021 General Assembly is now open (deadline: **13th of January 2021)**, and we are enthusiastic to organize a session on **ecohydrology in agroecosystems**. We kindly encourage you to submit an abstract in this session (more information on: <u>https://meetingorganizer.copernicus.org/EGU21/session/38756</u>

## HS2.10.7 | Ecohydrology in agroecosystems

Convener: Fabrice Vinatier<sup>1</sup> | Co-conveners: Seraphine Grellier<sup>2</sup>, Jean-Louis Janeau<sup>3</sup>, Gabrielle Rudi<sup>4</sup>



Ecohydrological processes are of primary importance in agroecosystems where fluxes of water are driven by vegetation, either cultivated in the fields or natural in the grasslands, semi-natural habitats and interstitial areas (open channels, riparian borders, inter-ranks of perennial crops) surrounding the cultivated crops. Human practices are a key lever to modify the composition and properties of vegetation in agroecosystems. While the understanding of these processes is important to improve agricultural management (e.g., reducing soil erosion and water stress), there is an increasing scientific demand to determine how vegetation can balance ecohydrological processes in agricultural production systems. This is necessary to support innovative and sustainable practices in fields such as agroforestry and agroecology. This session aims to bring together studies that consider different agroecosystem components in ecohydrological assessments. We invite contributions that focus on the impact (either positive or negative) of human intervention through different land uses and their associated agricultural practices on ecohydrological processes (e.g., plant transpiration and water use, influence of vegetation on stream flow, organisms fluxes through water) across scales (plant, plot, landscape and catchment) and methods (teledetection, proxydetection, experiments, remote sensing, and modelling).

**Keywords**: agricultural landscapes, crop management, hydrological processes, agroecology, agroforestry, ecohydraulics, dispersal

<sup>&</sup>lt;sup>1</sup> INRAe, LISAH - <sup>2</sup> Université de Tours, CITERES - <sup>3</sup> IRD, IEES-Paris - <sup>4</sup> AgroParisTech, G-EAU