



Press Release No 7

FruitCREWS Sets Out Research and Policy Priorities for Water-Resilient Fruit Production in Europe

Brussels, 20 October 2026 – The COST Action FruitCREWS (Fruit tree Crop REsponses to Water deficit and decision support Systems applications) has published its Position Paper on Research, Innovation and Policy Priorities for Improving Water Productivity and Resilience in Fruit Tree Crops. The paper is the main policy-oriented output of four years of work (October 2022 – October 2026) by a network of more than 350 researchers and stakeholders from 43 countries, and it is published as the Action's legacy to the research, farming and policy communities.

The paper starts from a problem specific to perennial crops. Orchards, vineyards and olive groves require a high initial investment, remain unproductive for the first years and then stay in the field for decades. Unlike growers of annual crops, fruit growers cannot change their crop or production cycle from one season to the next when drought or heat is expected, and a single stress event can reduce yield and fruit quality in the following seasons. As droughts and heat waves become more frequent, this makes the fruit sector particularly exposed to water scarcity.

Built on four years of science and a dialogue with policy makers

The Position Paper was prepared by the FruitCREWS Working Group leaders on the basis of the work of the Action's Working Groups, including a joint analysis of sensors, models and irrigation scheduling in fruit tree crops. It was then refined with the conclusions of the final FruitCREWS workshop at the European Parliament Info Hub in Brussels on 24 June 2026, where researchers discussed with representatives of DG AGRI, Members of the European Parliament, farmers' organisations and irrigation associations. Finally, the draft was opened to the whole FruitCREWS community, and 24 contributions received through a consultation were integrated into the final text.

The paper identifies three research and innovation priorities for future European and international programmes:

- **Enhancing crop resilience to water-related stresses.** More knowledge is needed on the physiological, morphological and genetic traits that drive the response of woody crops to drought, salinity and heat waves. The paper also points to the untapped genetic diversity of local cultivars and crop wild relatives as a source of drought resistance for



breeding. This knowledge should then be translated into irrigation protocols and decision support systems and validated across species and climates.

- **Accelerating the deployment of precision water management.** Today's tools allow precise irrigation scheduling at farm level, but water and nutrient needs vary within a single field. Combining satellite and ground observations with soil and plant water status data can help detect earlier the parts of an orchard most prone to water stress. Drip irrigation, the most efficient method, is not yet designed for this kind of spatial management, which is a clear innovation gap.
- **Scaling impacts from farm to basin level.** Higher efficiency on individual farms does not automatically reduce water consumption at basin level. The paper calls for linking farm decisions with basin and regional water planning, supported by remote sensing, artificial intelligence and climate scenarios, so that efficiency gains turn into real net savings.

What growers and stakeholders asked for

The discussion in Brussels added a set of enabling conditions without which new technologies are unlikely to reach farms. Stakeholders pointed to investments in water infrastructure, rural connectivity and energy grids, accessible financing for smallholders and cooperatives, and stronger Agricultural Knowledge and Innovation Systems (AKIS) and independent advisory services. They asked for common indicators that measure water productivity and economic performance, not water use alone, and for digital tools that are simple and built around farmers' real needs.

Farmers should be at the centre of water-resilience strategies, with specific attention to younger farmers, since most investment decisions are taken between the ages of 45 and 55. The paper also recalls that agricultural production cannot be fully decoupled from water use. Irrigated agriculture is part of the water cycle, helps to limit desertification and provides local cooling and other ecosystem services, while unsustainable irrigation can deplete aquifers and degrade ecosystems; both sides should be considered when water policies are designed.

As cross-cutting policy priorities, the paper calls for stronger AKIS, data governance frameworks that build trust in data sharing, and recognition of the ecosystem services of well-managed irrigated orchards. Within the Common Agricultural Policy, it recommends dedicated funding to deploy proven innovations on farms, for example by continuing and strengthening EIP-AGRI Operational Groups.

Looking back at the final workshop in Brussels, Action Chair Prof. Brunella Morandi (University of Bologna) says: "The discussion made clear that progress depends on helping growers put scientific knowledge and available technologies into practice, with the advisory support and policies needed to make adoption possible."

Messages already in the EU research debate

The key messages of the paper have already reached the discussion on the next EU research and innovation agenda for agriculture. On 24 September 2026, Dr Diego Intrigliolo (CSIC,



Spain), leader of FruitCREWS Working Group 5 and one of the main contributors to the Position Paper, took part in the EU AgRI 2040 Conference organised by DG AGRI in Brussels. The conference brought together policy makers, researchers, farmers and innovators to co-create priorities for the next generation of EU agricultural research and innovation. With the support of FruitCREWS, Dr Intrigliolo contributed to the breakout session on Water, Soil and Nutrients and presented its main conclusions in the plenary.

“I was positively surprised by how receptive policymakers were to the outcomes of the COST Action. The timing of our work was particularly good, as the main outputs of the Action became available just when the EU Water Resilience Strategy was being launched, with a major focus on increasing water use efficiency,” says Dr Intrigliolo.

A legacy that continues

FruitCREWS formally concluded on 16 October 2026, but its community remains active. The Action grew out of the Water Relations and Irrigation Working Group of EUFRIN, the European Fruit Research Institutes Network, which will be the natural home for continuing exchanges, alongside joint publications and new research proposals. The Position Paper, together with an Editorial published in *Scientia Horticulturae*, is intended as a reference for this next phase and for research funders, policy makers and advisory services working on water resilience in European agriculture. Legacy interviews with the members of the FruitCREWS Core Group are available on the Action’s website.

The full Position Paper is available at: [\[link / https://doi.org/10.20350/digitalCSIC/29284 \]](https://doi.org/10.20350/digitalCSIC/29284)

Notes to editors

- **Full title:** FruitCREWS Position Paper on Research, Innovation and Policy Priorities for Improving Water Productivity and Resilience in Fruit Tree Crops (prepared by the Working Group leaders of COST Action CA21142 and endorsed by the FruitCREWS community, 2026). DOI: <https://doi.org/10.20350/digitalCSIC/29284>
- **Editorial:** *Scientia Horticulturae*, <https://doi.org/10.1016/j.scienta.2026.114908>
- **About FruitCREWS:** COST Action CA21142, October 2022 – October 2026. More than 350 participants from 43 countries working on fruit tree responses to water deficit and on decision support systems for irrigation. Website: <https://cost-fruitcrews.eu/> · LinkedIn: FruitCREWS Action
- **Related:** EU AgRI 2040 Conference, 24–25 September 2026, Brussels – https://agriculture.ec.europa.eu/media/events/eu-agri-2040-conference-2026-09-24_en
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