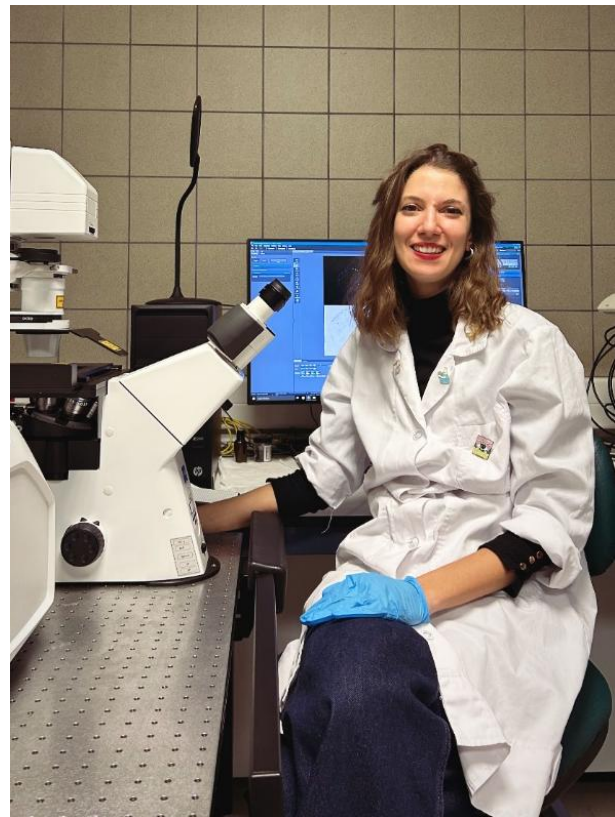


‘Science has historically been a male-dominated field. I want to share with other females in the field that we don’t have to “prove” ourselves in a male way - our unique experiences and insights stand as a strength, not as a weakness’

-Venetia Koidou-

Please introduce yourself and give us an overview on your research focus and expertise.

My name is Venetia Koidou and I am a Post-Doctoral Researcher in Plant and Environmental Biology Laboratory, splitting my time between the Department of Biotechnology and Biochemistry in University of Thessaly and the Institute of Industrial and Forage Crops in Hellenic Agricultural Organization, in Larissa, Greece. My research expertise lays at a molecular entomology level. During the years of my MSc. and PhD I focused in unravelling the molecular basis of insecticide resistance mechanisms of insects and developing highly precise genome editing tools, towards the future development and application of novel pest control strategies. My current career focus is on the risk assessment of low-risk double stranded RNA (dsRNA) pesticides and more specifically I investigate their fate in plants, their dissipation rate depending on the soil pH and organic matter as well as their impact on soil microbial communities, upon their environmental exposure.



What drew you to pursue a career in science, specifically in your field of research?

One of the main reasons that drew me to the pathway of scientific research is that Science provides an opportunity to combine several scientific fields and develop an integrated scientific approach.

My BA in Agriculture combined with my Master's degree in molecular biology and biomedicine along with my PhD in molecular entomology where I investigated molecular mechanisms related to insecticide resistance and symbiont interactions in insects, made me a molecular entomologist who studies new generation dsRNA pesticides today.

Furthermore, the ultimate freedom you often experience in this job is quite challenging, looking through the microscope lenses for example, compared to other more ordinary jobs. Additionally, concerning my current research focus, dsRNA pesticides are one of the latest trends in agricultural sector and this has made me eager to explore them to the core. Finally, the stimuli I received from my parent's lifestyle during my childhood stands for sure as the most critical factor for me in following a scientific career.

What are your main interests outside of your job? How do you maintain your work-life balance?

I have always invested time in personal activities, like reading philosophical books, hiking, skiing, taking photography and yoga lessons, in order to keep a balance in my everyday life. Nowadays in my free time I take dance and theater lessons, both serving as a profound medium for my self-discovery and personal growth, especially in contrast to the rigor and structure of my highly technical profession. The artistic nature of these practices contrasts beautifully with the precision required in my job. While technical work relies on logic, structure, and problem-solving, dance and theater engage the more intuitive and creative parts of my brain, creating a vital balance for me. This balance isn't just refreshing but essential, as it stimulates creative problem-solving and innovative thinking in one's technical pursuits. Engaging in artistic practices like these can rekindle the spark of creativity that might otherwise be dulled sometimes by repetitive tasks or rigid workflows. By engaging in these creative outlets, I not only develop artistic sensibilities but also bring a renewed sense of purpose, energy, and perspective in my professional life.

Do you think that the scientific communities can promote greater diversity and inclusion, especially for women in science? In what ways?

Women are established in Science many years now. However, scientific communities can and should actively promote greater diversity and inclusion, particularly for females in leading positions in science. Addressing systemic barriers is essential, starting with fostering an inclusive culture where we are supported, but in a way that discrimination is avoided. Mentorship programs that pair young female scientists with established professionals could provide guidance, networking opportunities, and create role models to demonstrate the way of the female success in science. Furthermore, implementing policies that address unconscious bias in hiring, promotions, and funding decisions, is critical to ensure that women have equal opportunities to thrive. *Flexibility in science is another key factor.* Many of us often face challenges balancing professional and personal responsibilities, particularly in fields demanding long hours or frequent travel. Creating family-friendly policies, such as parental leave and on-site childcare, ensures that we do not have to choose between our careers and personal lives. Ultimately, scientific progress depends on diverse perspectives and ideas. By investing in inclusivity, and breaking down barriers for female scientists, the scientific community not only could promote equality but also level up its capacity for innovation and discovery.

What advice would you give to your female colleagues and the next generation of women in science?

As part of the current community of women in Science, I frequently remind to myself to embrace my individuality and try to reject stereotypes that usually suggest a need to conform to traditional notions of success or leadership. Science has historically been a male-dominated field. I want to share with all the other females in the field, that we don't have to "prove" ourselves in a male way - our unique experiences and insights stand as a strength, not as a weakness! We shouldn't be afraid demanding equal opportunities, whether this is in education, funding, leadership, or recognition. I do realize though, that the phase of our life sometimes affects our choices; sometimes there are special needs that make us compromise more than the usual. Seeking out and building supportive communities with other females in science feels redemptive too. It is self-caring! Collaboration, rather than competition, through the development of a vocal communication between us, can smooth out barriers that female scientists face. Advocation for systemic changes, such as paid parental leave, mentorship programs, and policies that address both harassment and bias, is essential. It's not just about succeeding individually, but about creating pathways for all women to thrive!