

Session	Start-ups/SMEs looking for Finance: pre-seed/angel/seed funding
Title	Preventive & biological antifreeze sprays for frost protection
Company	W'Ice by
Speaker	Laure Craeye
Keywords feedstock	Precision fermentation
(max. 2)	
Keywords technology	Freeze inhibitors
(max 2)	
Keywords	Antifreeze Biostimulant
End-Product (max 2)	

Abstract:

Every spring, vineyards and fruit orchards are greatly at risk of late-spring frost, appointed by the European Commission as the leading cause of billions of euros in economic losses in fruit cultivation every year. Despite global warming, the risk for spring frost is even increasing under the current climate change. The million tons of fruit losses due to spring frost are contradictory to the United Nations' goal to improve food security within current land constraints. Existing anti-frost techniques fall short, are expensive, labour-intensive, and environmentally harmful due to carbon dioxide and fine dust emissions, their high energy use or use vast amounts of water leading to erosion and depletion of local water reserves. Furthermore, most of the current techniques require the cultivators to stay awake and take measures during the frost night, a very stressful occurrence. Cultivators state that protecting their harvests today is choosing for the least bad option to do so. The threat of loosing nearly the entire harvest in a single night reportedly has a big impact on the cultivator's wellbeing. To date, no effective, preventive solution exists. W'Ice will change that by developing a biological, highly-effective, sustainable and sprayable antifrost biostimulant that protects fruit crops preventively from late-spring frost damage. Our solution protects fruit crops while safeguarding the surrounding ecosystem and conserving precious water resources - giving growers peace of mind and helping secure the future of fruit cultivation under today's changing climatological challenges.