

Agritox 1st technical coordination and monitoring committee meeting in Belfast

The 1st technical coordination and monitoring committee meeting of AGRITOX was held at Queen's University Belfast on the 24th October 2019. The USC made a review of coordination and financial issues and presented some results within work packages 4 and 5. In this sense, the effect of yessotoxin (a marine toxin with antifungal properties) in the production of mycotoxins by *Fusarium graminearum* strains was disclosed. An extraction and analysis method were presented to quantify mycotoxins in feedstuffs; these methods were employed by the USC to analyse samples that the Cooperativa Agrícola de Vila do Conde (CAVC) collected from their farms. The 53% of samples contained mycotoxins, mainly emerging mycotoxins. On the other hand, a new methodology to remove mycotoxins from beverages was presented. Thirteen nanostructured materials of different sizes and compositions were developed to remove the main types of mycotoxins from liquid food matrices. In beverages, nanostructured materials allow the elimination of 90% of zearalenone, ochratoxin A and aflatoxins, 65% of fumonisin B1, and 20% of deoxinivalenol. This technology was patented (EP18382104). Studies on the composition of *Fusarium* populations in forage maize at the time of harvest for silage in NW Spain were also presented, outlining the generalized presence of species that produce type-B trichothecenes (mainly deoxinivalenol and its acetyl derivatives) and zearalenone. Finally, some important remarks about sample collection for fungal detection and identification and for mycotoxin analysis were made.



Figure1. Prof. Chris Elliott from QUB discussing Agritox research with the project team.



Figure 2. Group photo of the Agritox project partners after the 1st technical coordination meeting at QUB in October 2019.