199- DEVELOPMENT OF A NEMATICIDAL EXTRACT FROM *Paecilomyces lilacinus* [DESENVOLVIMENTO DE UM EXTRATO NEMATICIDA A PARTIR DE *Paecilomyces lilacinus*] Rodríguez, A.[2]; Arro, A.[2]; Alcalà, S.[1]; Ornat, C.[1]; Sorbías, F.J.[1]; Fernández, C.[2]; Lara, J.M.[2] [1]DEAB-UPC; [2]FUTURECO BIOSCIENCE S.L.; [1,2]Parc Mediterrani de la Tecnologia, c/ Esteve Terrades 8, Castelldefels 08860, Spain. E-mail: angela.sarro @futurecobioscience.com

Paecilomyces lilacinus is a fungal antagonist with recognized ability against phytopathogenic nematodes. There are several commercial products based on spores of this fungus, but with little stability and dependent on refrigeration. The aim of this study was to obtain extracts from metabolic activity of *Paecilomyces lilacinus* (strain FEEP PL0501) to be incorporated as active ingredient in a commercial bionematicide and to assess their effectiveness *in vitro*. A *screening* of culture media was made to select the higher yield of *P. lilacinus*. The fungus was subjected to different degrees of stress to induce the production of metabolites by three fermentation systems (bio-fermentor, shaker and static for 2, 3 and 15 days, respectively). Broth cultures were centrifuged and ultrafiltered to obtain different prototypes (technical product). Nematicidal activity of prototypes was evaluated *in vitro* against *Meloidogyne javanica* eggs masses and juveniles. Then, the technical products were replaced by water and maintained at constant temperature (25ºC), for a month. Nematicidal activity was assessed on egg hatching and juvenile mobility. The extract obtained from bio-fermentor caused 99% mortality for both stages. The prototype has retained its effectiveness after keeping it for 1 year at 4ºC. Extracts obtained from this study will provide the active ingredient for a product more stable, easy to produce at industrial level and less dependent on the environment than a classic bionematicide based on spores.