

PBA-O.08

SEARCHING AND IDENTIFICATION OF BIOACTIVE AND ALLELOPATHIC COMPOUNDS: PRELIMINARY ASSESSMENT OF *Dichrostachys cinerea* (Marabou) potentialities.

*Ariadna López Rodríguez*¹, *Déborah Geada López*¹, *Gretel Geada López*² y *Narciso Aguilera*³

¹Havana University, Cuba

²Pinar del Río University, Cuba

³University of Concepcion, Chile

email: alrodriguez@fbio.uh.cu

ABSTRACT. The marabou *Dichrostachys cinerea*, botanical family Mimosaceae constitutes one of most important plagues affecting around 56 % of Cuban crop and poultry areas (2012 estimated). This plant has different applications as wood, vegetal charcoal and activated charcoal for batteries. However, each one of these applications implies the cut down of the plant and does not take account that cut downs should be controlled for its impact on soils. Reason why it imposes the identification of another applications or sub-products of this plant which able its use as long as their populations won't be properly managed. It has been reported that marabou extracts have several metabolites with biocide, antifungal, antibacterial and antioxidant activities. Nonetheless most of studies evaluate methanol and aqueous extracts and its applications for human being and animals, which excludes the potentiality for finding another metabolites polarities and structures, as well as its applications for plants. Owing this the aim of our work was to identify the germinating and growth inhibitory capacity of root, leaves and stem marabou extracts. Aqueous extracts were used and the germinating and growth inhibitory capacity was assessed on seed and plants of *Nicotiana rustica*. An inhibition of germination was observed with leaves extracts, suggesting the presence of this kind of metabolites and the future potentiality for finding new compounds that might have this and other applications on crop fields.