

3rd International Conference and Exhibition on **Obesity & Weight Management**

December 01-03, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA

Cultivation of *Lucilia sericata* maggots for diabetic foot treatment

Mariana de San Juan, Licona Aguilar and Hector Sanchez Anaya
Universidad Autónoma Metropolitana, USA

For decades, maggot therapy has been applied as a treatment to wound healing. By including live green blowfly larvae in diabetic foot wounds it has found through debridement which hastened wound healing. That's why it is necessary develop a method to obtain higher performance on larvae production.

Methodology: We initiated an experimental studio to evaluate in what conditions the life cycle of the fly *Lucilia sericata* is more efficient for higher production yield larvae. Flies were captured on the outskirts of *canal de cuemanco*, a sewage dam located south of Mexico City. Specimens were lured with a bait in a state of putrefaction. Study subjects were placed in a cage and subjected for 3 months in four-week periods to different conditions of temperature and lighting, only keeping the same type of food. Oviposition frequency was assessed in addition to the number of larvae obtained every week. Larvae and eggs samples were subsequently grown on blood agar at different concentrations in order to find out which concentration was achieved better growth of larval stage 3, that is, when they have the appropriate ripening to be applied to the diabetic foot.

Results: It was found that the number of larvae obtained depends on the conditions to which the biological cycle of the fly undergoes. For other side was found that the development of eggs and maggots is more productive in certain concentrations of blood agar; suggesting that it might have found a method to produce ripe maggots in less time for treatment of diabetic foot.

Biography

Mariana de San Juan has completed his Nutrition degree at the age of 23 years from Universidad Autonoma Metropolitana in Mexico City. He completed an internship in food chemistry at the University of Maimonides in Buenos Aires, Argentina this year and currently is studying maggot-therapy as treatment for diabetic foot and another pathologic wounds and has been working like researcher colaborator for four years in Universidad la Salle, México, Department of chemical sciences.

Desanjuan.mariana@gmail.com