Crickets as Social Business Model for Rural Women in Colombia

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Abstract : In 2013, the Food and Agriculture Organization of the United Nations (FAO) said that insect production for food and feed could become an economic opportunity for rural women in developing countries. However, since then, just a few initiatives worldwide had tried to implement this kind of project in zones of tropical countries without previous experience in cricket production and insect human consumption, such as Colombia. In this project, ArthroFood company and the University of La Sabana join efforts to make a holistic multi-perspective analysis from biological, economic, culinary, and social sides of the Gryllodes sigillatus production by rural women of the municipality of La Mesa, Cundinamarca, Colombia. From a biological and economic perspective, G. sigillatus production in a 60m2 greenhouse was evaluated considering the effect of rearing density and substrates on final weight and length, developing time, survival rate, and proximate composition. Additionally, the production cost and labor hours were recorded for five months. On the other hand, from a socio- economic side, the intention of the rural women to implement cricket farms or micro-entrepreneurship around insect production was evaluated after developing ethnographies and empowerment, entrepreneurship, and cricket production workshops. Finally, the results of the elaboration of culinary recipes with cricket powder incorporating cultural aspects of the context of La Mesa, Cundinamarca, will be presented. This project represents Colombia's first attempt to create a social business model of cricket production involving rural women, academies, the private sector, and local authorities.

Keywords : cricket production, developing country, edible insects, entrepreneurship, insect culinary recipes **Conference Title :** ICAE 2021 : International Conference on Advances in Entomology

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