

INTERCROP OF OIL SEEDS IN SUGARCANE: AGRICULTURAL PERFORMANCE AND BASIS FOR CROP MODELING

Felipe Gustavo Pilau

Higher School of Agriculture "Luiz de Queiroz" / University of São Paulo (ESALQ/USP)

FAPESP Process 2014/18912-9 | Term: Jan 2015 to Dec 2016



Figure 1. Intercropping sugarcane + crambe (pre-flowering)

Based on the current international high demand, the increasing demand for food, and the environmental issues related to intercropped farming system, this project aims to assess growth, development, and adaptability of canola and crambe, and propose a new farming system for intercropping oil seeds in sugarcane plantations. Experimental plots of oil seeds and sugarcane will be installed, as well as areas of intercropping sugarcane + crambe and sugarcane + canola. Additionally, meteorological measurements and soil conditions in each production system. It is believed to possible generating a new farming system especially useful in the reform areas or those unsuitable for it due to mechanized harvesting, besides adding production of oilseeds in their own sugarcane areas. In this system the cycle of annual crops happen during regrowth of ratoon. The results will be further exploited for studies on crop modeling of crambe and canola and sugarcane in a intercropping system.

SUMMARY OF RESULTS TO DATE AND PERSPECTIVES

Along the first season, the experiment was fully installed in the area of the Biosystems Engineering Department at Esalq/USP, in Piracicaba/SP. We used the ver. RB867515 as the major sugarcane cultivar in Brazil and sowed the consortium sowing oilseeds crambe (FMS Brilhante) and canola (Hyola 61 and Hyola 401) by April 15th, 2015. In order to evaluate the intercropping, single sugarcane, crambe and canola plots were also sowed. Oilseed plots were not harvested yet and sugarcane plots are still developing to be harvest in 2016. Results are not enough for any preliminary recommendation or specific findings. However, the vigorous growth and development of oilseed and sugarcane in the farming systems pointed out for the feasibility of the proposal.



Figure 2. Crambe plots – flowering

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Felipe Gustavo Pilau

Departamento de Engenharia de Biosistemas
Escola Superior de Agricultura Luiz de Queiroz
Universidade de São Paulo
Av. Pádua Dias, 11
CEP 13418-900 – Piracicaba, SP – Brasil

+55-19-3447-8506
fgpilau@usp.br