



Abstract Book



ISBN 978-963-89690-7-1

**34th Annual Meeting of the International Society of Chemical Ecology
12-18 August 2018, Budapest, Hungary**

ABSTRACT BOOK

Cover photo: The insect on the ISCE logo is a moth, a young female *Erannis bajaria* (Geometridae), in calling posture, emitting her pheromone [(3Z,6Z,9Z)-3,6,9-octadecatriene and (3Z,6Z,9Z)-3,6,9-nonadecatriene, G. Szócs, W. Francke et al., unpublished] (photo L.Z. Nagy)

Parpinelli R.^{1*}, Alves J.², Toledo V.¹, Nunes E.², Hoffmann-Campo C.², Gazzoni D.^{2*}
Nectar of soybean flowers as attractiveness factor for pollinators

¹Universidade Estadual de Maringá-PR-Brasil

²Empresa Brasileira de Pesquisa Agropecuária, Embrapa Soja, Londrina-PR- Brasil

Corresponding author's e-mail address: *decio.gazzoni@embrapa.br*

Pollination is an important regulatory ecosystem service for production of food, as pollinated flowers often produce more and better quality fruits and seeds. The attractiveness to the pollinator agents depends on factors such as floral morphology and colour intensity as well as the number of flowers per plant, olfactory, visual-tactile cues and seasonal availability. Bee body size in relation to the flower and nectary location is also important. To attract pollinators, the flower must secrete a high volume of nectar. Such insect-plant interaction is a symbiosis, and the floral nectar an important reward for the pollinating visitor. Several studies were carried out but, but still, there is no consensus among scientists regarding the role of pollinators in soybean (*Glycine max* L.) and many questions remain unanswered, including the control of the factors involved with such attraction. This study aimed to test and validate a technique for soybean flower (white/purple) nectar collection and to define the nectar sugar profile of soybean produced under normal growing conditions. Different collection techniques have tested the microcapillary with a capacity of 0.5µL was the only viable alternative. The determination of the nectar sugar profile was performed by HPLC-RI. The average volume of the nectar was of 0.25µL and 0,30µL for purple and white flowers, respectively. The sugar profile varied in qualitative and quantitative terms. A nectar sampling technique, simulating the pollinator suction process, were established without damaging the structure of the soybean flowers.

Keywords: pollination, soybean, nectar, sugar

Project supported by a grant from Bayer Crop Science

Session/symposium: *Practical applications/independent presentation*

POSTER

number: 150