Comparing Strategies on Weed Management in Peanut Production: A Brazil's Overview

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The peanut crop has increasingly conquered an important space in Brazil's agriculture. According to the projection of the National Supply Company, a production of up to 537.6 thousand tons is expected for 2020, covering an area of up to 149.6 thousand hectares. One of the major obstacles in growing peanuts is the proper management of weeds. Because it is a crop planted in areas of sugar cane, mainly in the state of Sao Paulo, many of the weeds become common to both crops. Thus, the adoption of methods of control is necessary.

In terms of management, some studies have suggested a decrease in planting spacing. The adoption of smaller spacing than the conventionally used proved to be effective, mainly for low level cultivars. In this way, with the closure of the peanut canopy, the establishment of new weeds is reduced. In the biological control of weeds, an area that is still little explored, a preliminary research conducted by the Laboratory of Weeds at Sao Paulo State University, Jaboticabal, BR, tested the allelopathic effect of white lupine plants (*Lupinus albus* L.) and it was found that this was able to control the growth of wild radish (*Raphanus raphanistrum* L.) in peanut areas. Demonstrating that rotation in the peanut area with crops with allelopathic potential can be an interesting strategy.

Of the cited managements, the chemical is the most used. However, the number of registered products is still incipient. With the recent insertion of the peanut crop as a Crop with Insufficient Phytosanitary Support, by the Ministry of Agriculture of Brazil, it allowed companies and research institutes to carry out research in order to facilitate the registration of new active principles for the crop. In Brazil, the following active ingredients are currently registered for use in peanuts: trifluralin, alachlor, bentazon, imazamox, clethodim, quizalofop-p-ethyl and imazapic. Research with promising results has been conducted and indicating that s-metolachlor, 2-4D, mesotrione, sulfentrazone, lactofen, imazethapyr, chlorimuron, among others, may become active principles that can be used.