

**ALLELOPATHIC POTENTIAL OF TEAK
(*TECTONA GRANDIS*)****Macías F. A.¹, Lacret R.², Varela R. M.¹, Nogueiras C.²**¹ *Grupo de Alelopatía. Departamento de Química Orgánica. Facultad de Ciencias
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The combination of crops with forest trees is a powerful tool applied for more than half a century. This methodology increases food production and it provides wood as by-product. It also enhanced soil preservation, soil protection against erosion, and, in some cases, weed suppression. Generally, these agroforestry systems have been successful. Usually, the species selection to intercultivate has been made on the basis of the empirical knowledge of farmers. The allelopathic compatibility of forest and cultivar species, can determine the success of an agroforestry system (1).

Teak (*Tectona grandis*, *Verbenaceae*), native tree from tropical areas in Asia, is the source of one of the most valuable wood (2). This tree has been successfully used in agroforestry systems (taungya system) and in crop rotation in India, Costa Rica, Venezuela and Cuba. Thus, allelopathic activity over maize, frijol, and mountain rice cultures has been attributed to it (3).

Herein, we report the phytotoxic activity of aqueous extracts from bark and leaves of *Tectona grandis* between 1000-125 ppm, on the germination, root and shoot lengths of STS species: *Lepidium sativum* L., *Lactuca sativa*, *Lycopersicum esculentum* (dicotyledoneous), *Allium cepa* and *Triticum aestivum* L. (monocotyledoneous). The bioassays results showed that bark extracts of *Tectona grandis* to have higher phytotoxicity levels. The most affected parameters were root length of tomato, onion and wheat.

REFERENCES

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