



Management of shells of giant African snails (Achatinidae) from the markets of Abidjan (Côte d'Ivoire).

KOUAKOU Konan Théodore Beyogbin^{1*}, KOUASSI Daniel Kouadio², KOUADIO Yatty Justin ¹

¹Laboratoire de Biologie et Amélioration des Productions Végétales - Université Nangui Abrogoua (Abidjan, Côte d'Ivoire), 02 BP 801 Abidjan 02.

² Université Jean Lourougnon Guédé (Daloa, Côte d'Ivoire), BP 150 Daloa.

* Corresponding author email: konantheodore@gmail.com, Tel: +225 05392439

Original submitted in on 11th September 2014. Published online at www.m.elewa.org on 1st December 2014. <http://dx.doi.org/10.4314/jab.v83i1.13>

ABSTRACT

Objective: this study aimed to estimate the amount of snail's shells produced in the Abidjan City and the mode of management of empty shells for possible reuse.

Methodology and Results: An investigation was carried out by a questionnaire on 120 snail retailers' in the markets of Abidjan. The data was stripped by Sphinx Plus 2 software to study (1) the marketing system of the snail in city of Abidjan, (2) the origin and the mode of collection of animals sold in Abidjan; (3) the quantity of snail per year and (4) the management of shells.

The trading of the snail in Abidjan is exclusively done by women of all ages, educated and noneducated. Retailers provide approximately 1,900 tons per year of empty shells, from wild harvesting of the forests of western and south-western areas of Côte d'Ivoire. A very large part of empty shells is thrown away without sanitation.

Conclusion and application of results: A better understanding of the snail's marketing chain is essential for eventual use of the shell by-product. The markets of Abidjan produced a large amount of empty snail shells, rich in calcium, which are thrown without sanitation, while these shells can be used to correct soil acidity as fertilizer, and for animal feed. Thus, to optimize the use of snail's shells in areas such as agricultural production, livestock feed, medicine, ways for the sustainable management are required.. Finally, the results can help mainly farmers and ranchers to establish their production strategy.

Keywords: Snail, empty shells, environment, Abidjan