

SITUATION AND PERSPECTIVE OF ENTOMOPHAGY IN KINSHASA

Nsevolo Papy ^a; Caparros Megido Rudy ^a; Blecker Christophe ^b; Danthine Sabine ^b; Paul Aman ^b; Haubruge Éric ^a; Taofic Alabi ^a; Francis Frédéric ^a

^aEntomologie Fonctionnelle et Evolutive, ^bLaboratoire de Science des Aliments et Formulation. Gembloux Agro-Bio Tech, Université de Liège, Passage des déportés, 2, 5030 Gembloux, Belgique.

Introduction

Eating edible insects in Republic Democratic of Congo is a tradition for centuries but a lack of knowledge remains about an actualized inventory of species consumed in the country. In the capital, Kinshasa, local people are increasingly influenced by the western culture and they tend to ignore indigenous customs as entomophagy in favor of beef or chicken meat. A better valorisation of edible insects is needed to retain a part of the cultural identity of congolese people. General purposes of this study were to realize a rigorous inventory of the edible insects species consumed and to point the economic and social implications of entomophagy in Kinshasa to provide positive arguments for insect consumption.

Material and Method

During 4 months, insect samples were collected in 24 townships of Kinshasa to identify the common edible insect species consumed in the capital (Fig 2). Two inquiries were also performed during this study. The first was performed on 275 respondents and focus on the insect consumption in Kinshasa. The second was performed on 67 insect sellers and focus on the order sold in market.

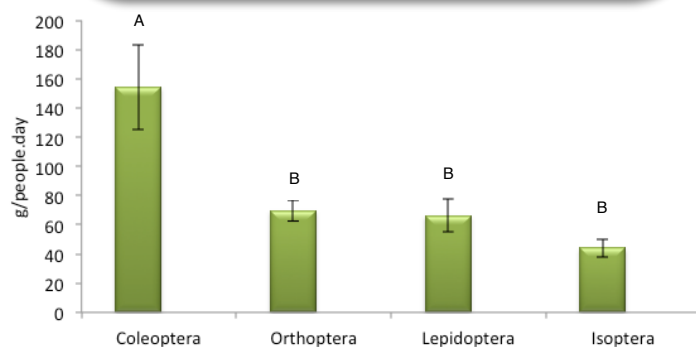


Fig 1 Average of insect quantities consumed for each order

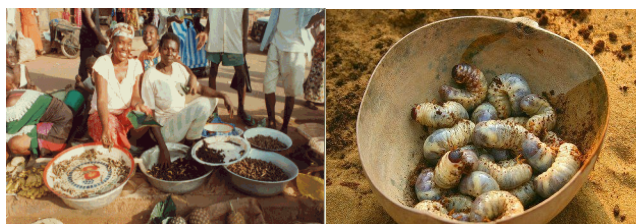


Fig 2 Edible insects on market in Kinshasa (Source: fao.org and europe-entomophagie.com)

Results and Discussion

According to our studies, 14 edible species were inventoried as regularly consumed (Table 1). Generally 80.0% of the Kinshasa population consumes at least one species of insects 5 days per month. Coleoptera are the most consumed order (Fig. 1). The key peoples in the edible insect sector are mostly women. Edible insect trade is relatively profitable while the monthly income varies from 91,75€ to 95,65 € for sale volume of approximatively 3 kg of insects per day (Fig. 3). The incomes generated by this activity contribute to the well being of households, to reduce poverty and food insecurity in the capital Kinshasa. Future studies should focus on sustainable ways of harvesting wild populations, the use of improved conservation practices, the enhancement of cottage industries for farming insects and the development of economically feasible ways of mass-rearing edible species.

Order	Family	Vernacular name in local language	Vernacular name in English	Species
Lepidoptera	Saturniidae	Bingubala jaune	Caterpillar	-
		Bikubala	Caterpillar	-
		Mikwati	Caterpillar	<i>Cirina forda</i> (Westwood)
		Misati	Caterpillar	<i>Imbrasia</i> sp.
		Makonzo	Caterpillar	<i>Imbrasia</i> sp.
		Mangaya	Caterpillar	<i>Imbrasia</i> sp.
		Tungubi	Caterpillar	<i>Elaphrodes lactea</i> (Gaede)
Coleoptera	Dynastidae	Makokolo	Palm dynastid beetle ♂	<i>Augosoma centaurus</i> (Fabr.)
		Makokolo	Palm dynastid beetle ♀	<i>Augosoma centaurus</i> (Fabr.)
		Makokolo	Palm dynastid beetle *	<i>Augosoma centaurus</i> (Fabr.)
	Curculionidae	Mpose	Red weevil*	<i>Rhynchophorus</i> sp.
Orthoptera	Gryllidae	Makelele	Cricket	<i>Gryllus</i> sp.
		Makonki	-	-
Isoptera	Termitidae	Makenene	Termite	<i>Macrotermes</i> sp.
		Ndongé	Termite	-

Table 1 Inventory of the insect species diversity collected on Kinshasa market

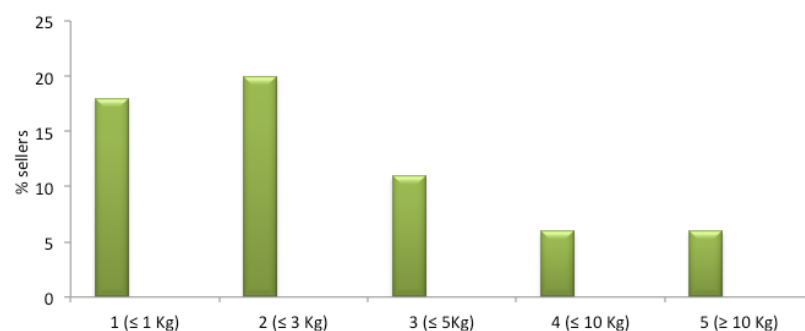


Fig. 3 Distribution of daily quantities of insects sold by seller



www.gembloux.ulg.ac.be/entomologie-fonctionnelle-et-evolutive

