

Journal of Applied Biosciences 94:8915 – 8929

ISSN 1997-5902

## Household uses of the banana plant in eastern Democratic Republic of Congo

## Kamira M<sup>1</sup>, Sivirihauma C<sup>2</sup>, Ntamwira J<sup>1</sup>, Ocimati W<sup>3\*</sup>, Katungu MG<sup>2</sup>, Bigabwa JB<sup>4</sup>, Vutseme L<sup>2</sup> and Blomme G<sup>5</sup>

<sup>1</sup>Bioversity International, South Kivu, Democratic Republic of Congo mkamira2@yahoo.fr; ingjules2007@yahoo.fr
<sup>2</sup>Université Catholique du Graben, Butembo, North Kivu, Democratic Republic of Congo c.sivirihauma@gmail.com;
gracemukatakamba@yahoo.fr; vutseme12@yahoo.fr
<sup>3</sup>Bioversity International, Uganda w.ocimati@cgiar.org;
<sup>4</sup>Université Catholique de Bukavu, South Kivu, Democratic Republic of Congo
<sup>5</sup>Bioversity International, Addis Ababa, P.O. Box 5689, Addis Ababa, Ethiopia g.blomme@cgiar.org

\*Corresponding author (w.ocimati@cgiar.org)

Original submitted in on 30<sup>th</sup> April 2015. Published online at www.m.elewa.org on 30<sup>th</sup> November 2015 http://dx.doi.org/10.4314/jab.v95i1.1

## ABSTRACT

*Objective*: Banana is ranked first among staple crops in the eastern Democratic Republic of Congo (DR Congo). Depending on the agro-ecological conditions, cultivars grown, cultural and socio-economic factors, the use of other banana plant parts other than the fruit pulp, has been widely reported. This has not been documented in this region. This study examined the other household uses of banana in North and South Kivu provinces, eastern DR Congo.

*Methodology and results*: This study was conducted through surveys covering 200 randomly sampled households (with at least 50 banana mats), each in North and South Kivu in the years 2011. Data were collected on the use of different banana parts, other than the fruit pulp, using a structured questionnaire. All the banana parts were found to be useful, though with varying levels of importance. Commonly used parts included the leaves (green/dry), pseudostem and the peels. The corms/rhizomes were the least used parts. The most prevalent uses across plant parts included use for mulch and compost, feed for livestock, construction materials, ropes for tethering small ruminants and play items. A small fraction of the households used male buds for food, feed and medicine. Other uses included extraction of fibre, arts and crafts and use as medicine.

*Conclusion and application of findings*: Culinary and medicinal attributes, use for art and crafts however, look to be underexploited and yet could be of great benefit to resource constrained communities. An indepth study is recommended especially to verify and understand the culinary and medicinal attributes reported for the different plant parts in the region. Use of the male bud as a vegetable was also reported and could be promoted among communities in the region. The nutrient value of the pseudostem is high and could be promoted as animal feed in this highly populated region to enable zero grazing of small ruminants. **Key words:** Culinary, medicinal attributes, tethering