



**HAL**  
open science

## African eggplants and nightshades: an overview of indigenous vegetables

Marie-Christine Daunay, Anne-Laure Girard

► **To cite this version:**

Marie-Christine Daunay, Anne-Laure Girard. African eggplants and nightshades: an overview of indigenous vegetables. 9. Solanaceae Conference (SOL2012), Aug 2012, Neuchâtel, Switzerland. hal-02745546

**HAL Id: hal-02745546**

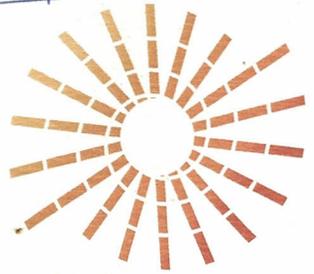
**<https://hal.inrae.fr/hal-02745546>**

Submitted on 3 Jun 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

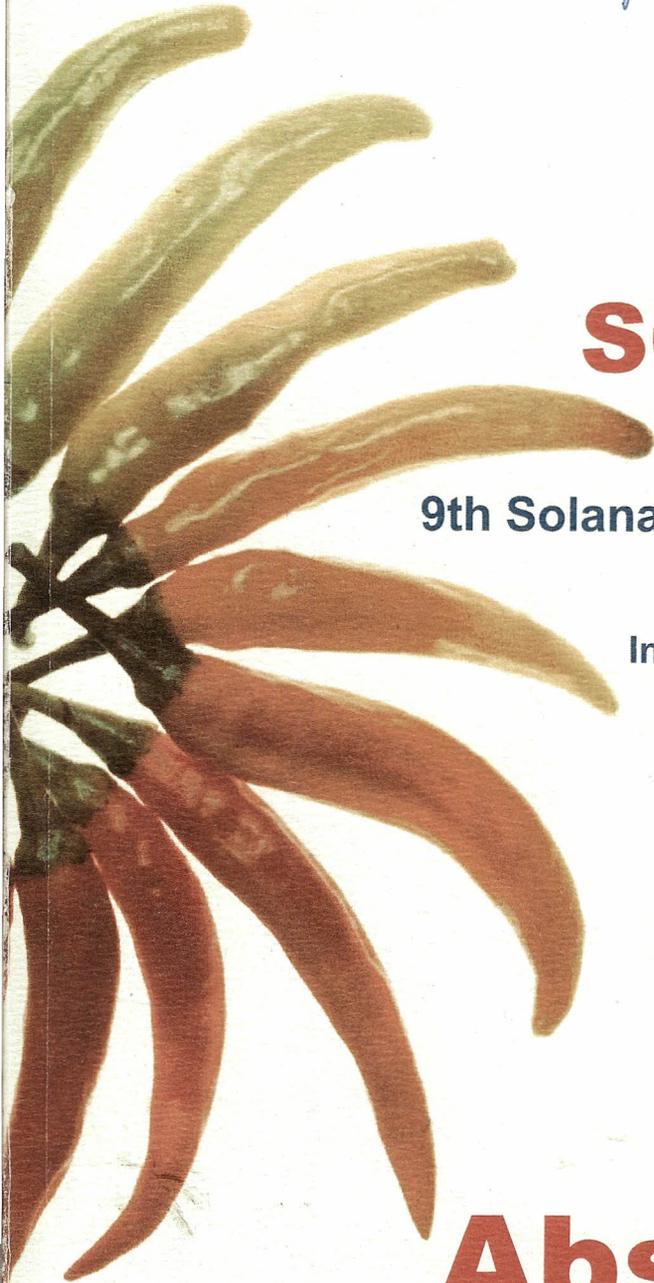
L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

*Veronique Lepelme*



**SOL2012**

**9th Solanaceae Conference**  
August 26-30, 2012  
From the Bench to  
Innovative Applications



**Abstract  
Book**

**unine**

UNIVERSITÉ DE  
NEUCHÂTEL

## **African eggplants and nightshades: an overview of indigenous vegetables**

**Marie-Christine Daunay** and Anne Laure Girard

INRA, Génétique et Amélioration des Fruits & légumes, UR 1052, Montfavet, France

Several Solanaceae species are found among the many indigenous African vegetables. They belong to the wide genus *Solanum*, and are part either of the *Leptostemonum* subgenus (e.g. *S. aethiopicum*, *S. macrocarpon*) to which the common eggplant *S. melongena* belongs to, or to the subgenus *Solanum* members of which are often referred to as nightshades (e.g. *S. scabrum*, *S. villosum*). Statistical data of surfaces or tonnage for these fruit and/or leafy vegetables are scarce. Most of the material cultivated nowadays still consist of local landraces displaying a wide phenotypic diversity. For most of the species, geneflows occur between the wild native compartment and the cultivated one, with as a result a loose limit between both. Cultivated germplasm and wild relatives, collected as early as in the 1980s under the umbrella of IBPGR, and much more recently by AVRDC, is presently maintained by a few germplasm holders. The main scientific breakthroughs concern (i) the taxonomic treatment of these species, (ii) the investigation of their wild relatives, (iii) inheritance studies and more recently (iv) some molecular insights of their diversity. Breeding targets are numerous and the potential of genetic progress is high given the wide diversity of these species. Genomic knowledge of better known Solanaceous crops can benefit to the breeding of these indigenous vegetables, although the low seed price African peasants can yet afford might limit its use.