

The technical production, storage and conservation routes of chilli peppers (*Capsicum* spp.) produced in Benin and constraints impeding the development of the sector.

Nicéphore M. Glodjinon¹, Pacôme A. Noumavo^{1, 2}, Kifouli Adéoti¹, Kamal Garba¹, Sonangnon H. S. Kouhoundé¹, Brice M. Ohin¹, Hama Cisse³, Noel S. Tovide¹, Marcellin C. Fainou¹, Fatiou Toukourou¹, Lamine Baba-Moussa², Aly Savadogo³, Farid Baba-Moussa^{*1}.

¹Laboratoire de Microbiologie et des Technologies Alimentaires, Faculté des Sciences et Techniques, Université d'Abomey-Calavi, 04 BP: 1107 Cotonou, République du Bénin.

²Laboratoire de Biologie et de Typage Moléculaire en Microbiologie, Faculté des Sciences et Techniques, Université d'Abomey-Calavi, 05 BP: 1604, Cotonou, République du Bénin.

³Lahoratoire de Biochimie et Immunologie Appliquée, Unité de Formation et de Recherche en Sciences de la Vie et de la Terre, Université Professeur Joseph Ki-Zerho, 03 BP: 7021, Ouagadougou 03, Burkina Faso. **Corresponding author:** Farid BABA-MOUSSA, +229 96926828, fhmouss@yahoo.fr

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1 ABSTRACT

Chilli pepper (Capsicum spp.) is an annual vegetable fruit used as a spice in almost all food and especially in all local dishes in Benin. However, it is neglected in many countries and relegated to the background which does not favor the agricultural development. As a result, its cultivation and conservation are still traditional and face many cultural and post-harvest constraints. The objective of this work is to make an investigation on the current state of the chilli pepper sector in Benin from the planting, growth, harvest until the transformation through storage and preservation. Overall, the review presents all the technical shortcomings hindering the opening of the sector on its socio-economic environment and to make recommendations for the improvement of the quality of chilli pepper sold and consumed in Benin. Thus, the results of this review indicate that there are several local varieties of chilli pepper grown in Benin belonging to three species of the Solanaceae family: Capsicum chinense (annual variety), Capsicum annuum L. (annual variety) and Capsicum frutescens (perennial variety). Its production is generally in rainfed or irrigated crops, in truck farming or on mainland. The best farming technique is the one that begins with the nursery and its success depends on the quality of the plants resulting from this stage. The best methods of storage and preservation vouching a good sanitary quality of chilli pepper are still to be promoted. The main problem encountered by the tillage of chilli peppers in Benin is its contamination by mold during its production and storage. It is therefore important to follow the technical production, storage and preservation routes, to assess the susceptibility of chilli pepper to mold at each stage and to measure the mycotoxins throughout the production chain so as to vouch the safety of chilli pepper consumers and to develop the chilli pepper sector in Benin.