A review of taxonomic inventory of vegetable amaranths in Ghana and an outlook on characterization of local amaranth species for farmers

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Abstract

Amaranths (*Amaranthus* spp.) are popular African traditional leafy vegetables which have almost gained the status in some African markets as a mainstream grain and vegetable crop that were earlier categorized as an underutilized African traditional vegetable. However the characterization of the local varieties in national catalogues and herbaria have received inadequate focus from researchers. This makes it difficult to recommend and supply farmers with accessions that have the desired characteristics needed by farmers. In this review, we aim to achieve two objectives; 1) a preliminary inventory of vegetable amaranth species originating or characterized in Ghana and 2) to review methods of characterizing germplasm of amaranths and summarize their application to enhance local characterization of vegetable amaranths in Ghana. Objective one will be achieved by employing scientific search engines such as Web of Science, Science Direct, Agricola, Scopus and visit websites of germplasm databases such as ECP-GR (European cooperative Programme for plant Genetic Resources and the GRIN-Global (U.S Nation Plant Germplasm System) published floras, and other national catalogues to inventory vegetable and grain amaranths literature, combined with characteristics of interest to amaranth farmers in Ghana.