Agri-2014

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference on
Agricultural & Horticultural Sciences

February 03-05, 2014 Hyderabad, India

The Biology, utilization and phytochemical composition of the fruits and leaves of *Gongronema latifolium* Benth

Aniefiok Ndubuisi Osuagwu

University of Calabar, Nigeria

Abstract

Basic information on a plant species is important in the improvement of the species. This study was carried out to investigate and understand the biology, utilization and phytochemical composition of *Gongronema latifolium* Benth., which is a spice plant growing in the humid forest vegetation of South-Eastern Nigeria. Results obtained showed that the species had culinary and medicinal properties. *G. latifolium* was found to have simple and opposite leaves, dehiscent seed pod (follicle), that opens along a single seam. The seeds are flat with white hairy pappus, The flowers are bisexual, regular with pale yellow coloured petals and superior ovary. Phytochemical analysis of the tender fruits and mature leaves of *Gongronema latifolium* revealed the presence of alkaloids, tannins, saponins, flavonoids, phenols, phytic acid and hydrocyanic acid. The phytochemicals were found to be higher in the fruits than the leaves ($P < 0.001$) except the flavonoids which was higher in the leaves than in the fruits ($P<0.001$). The presence of these phytochemicals account for the nutri- ceutical /medicinal properties of *Gongronema latifolium.*

Key words: *Gongronema latifolium,* spice plant, phytochemical, utilization, bisexual flowers.

Biography

Aniefiok Ndubuisi Osuagwu obtained her PhD in 2002 from the University of Calabar, in Genetics and Plant Breeding. She teaches in the Department of Genetics and Biotechnology of the same University. She recently (2012) updated her knowledge on practicals in plant molecular genetics in the Department of Crop Science, Washington State University, Pullman, United States. She also attended training on 'Plant genetic resources and seeds; building community resilence in the face of climate change', held in India but organized by Centre for Development Initiative, Wangeningen. She has twelve articles in reputable journals to her credit.