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VEGNEWS

A Quarterly Newsletter of Ni-Can Veg Project 106511 Issue No.4, September 2012

EDITORIAL

Building internal capacity for streng hening field performance is vital to the operation of Ni-Can Veg Project. This edition offers insight into the team's efforts towards developing a gender frame work for the project. It also covers some aspect of on-station experimental and field activities.

NI-CAN VEG PROJECT TEAM MET TO FINE-TUNE GENDER FRAMEWORK

Gender Team of Ni-Can Veg Project recently met at the Obafemi Awolowo University, Ile-Ife, Nigeria to work on thegender framework of the project. The Canadian team - Dr. Dana Mont and Ms Pamela Johnson led by Dr. Richard Watuwa of the University of Cape Breton, Canada arrived at Obafemi Awolowo University, Ile-Ife, Nigeria on the 24th August, 2012.

The Nigeria Team led by Dr. (Mrs) O. F. Deji includes Prof. A. B. Ayanwale, Prof. (Mrs.) K. Taiwo, Dr. O. T. Alao, Dr. J. O. Ayinde, Mr. Koledoye Olugbenga and Miss. Amusan Abiodun. The team, were welcomed by the two Principal Investigators – Prof. D. J. Oyedele and Prof. C. O. Adebooye. A series of intensive meetings followed to review the various activities relating to gender since project inception and to fine-tune the Gender Equity Assessment Framework for the project.

The Gender Group and Principal Investigators in Nigeria

The Gender Group made a familiarization visit to two of the project sites: Iludun Ekiti, Ekiti State and Akanran-Ibadan, in Oyo State to interact with both male and female project farmers with the aim of carrying out reliability and consistency tests on the framework before implementation.

Also, the Canadian team members were later taken on a guided tour to some historical sites including Osun Osogbo groove, Oluminrin water in Erin Ijesa and Nike Art Gallery in Osun State, one of the project states in Nigeria.

A group discussion between gender team and male farmers in the project at Akanran, Oyo State

A group discussion between gender team and female farmers in the project at Akanran, Oyo State

WEATHER STATION INSTALLED IN ILEJEMEJE LOCAL GOVERNMENT AREA OF EKITI STATE, NIGERIA

On Wednesday, 11th July, 2012 the Ni-Can Veg team members were in Ilejemeje Local Government Secretariat in Ekiti State to install a weather station for collecting weather parameters for the area. The team was received by the Secretary of the Local Government Council, Honourable Ajisegiri Johnson, on behalf of the Chairman, Prince Bamigboye Adegoroye, who was unavoidably absent. Other officers of the Local Government Area in attendance were: Head of Agriculture, Mr. A. O. Egbewole and Mr. S. O. Andero. The Project team used the opportunity to inform local policy makers about the project and solicited their support for the Underutilized Indigenous Vegetable farmers. After the meeting, Professor D. J. Oyedele officially presented the weather station equipment to the people of the community. The weather station was subsequently installed on the premises of the Local Government. Other weather stations have been installed on the premises of Anglican Secondary School, Arigidi Akoko, Ondo State; on the premises of Ibadan Polytechnics, Saki Campus, Oyo State and on the Obafemi Awolowo University Teaching and Research Farm, Osun State.

Prof. Duro Oyedele officially presenting the weather station equipment to the Secretary of the Local Government Area

A Postgraduate Student, Mayowa Adelekun taking initial weather readings at the Saki Station

.....WOMEN FARMERS GROUP INAUGURATED

The recently organized women farmers' group, was ceremoniously inaugurated .

Ni-Can Veg team with project women farmers after the ceremonial inauguration of their group at Elejemeje

RAMO ELEFO HITS HOUSEHOLDS IN EKITI AND OSUN STATES OF NIGERIA

Ramo Elefo, a weekly radio program designed to create awareness of Ni-Can Veg Project activities amongst millions of farm families in Southwest Nigeria effectively took off on the 22nd of July, 2012 as planned. The program, anchored by Professor Dixon Olutade Torimiro -Department of Agricultural Extension & Rural Development, Obafemi Awolowo University, Ile-Ife and Dr. Titus Olugbenga Alao - Department of Agricultural Economics and Extension, Osun State University, Ejigbo-Campus, is conceptualized to focus on the production, processing, marketing and consumption of indigenous vegetables among the resource poor farm families. In packaging the jingles, parameters such as gender variability, household composition and nutritional needs, prevailing perceptions of indigenous vegetables' consumption and economic/marketing potentials were Considered.

Two prominent radio stations, Orisun 89.5 FM in Ile- Ife, Osun State and Ekiti 91.5 FM in Ado- Ekiti, Ekiti State were purposively selected for airing the programmes because of their coverage and their popularity within their various locations. The weekly program, which is being relayed in Yoruba at 8.45 pm every Sunday in Osun State and 6.45 pm every Saturday in Ekiti State, is expected to run throughout the tenure of the Project.

The programme has given the Ni-Can Veg Project a boost as increasing awareness is being created in the various locations and beyond. Many telephone calls continue to be received from farmers seeking the possibilities of being involved in the Project.

ON STATION EXPERIMENTAL FARM ESTABLISHED AT OAUTRF

The ten underutilized indigenous vegetables: *Solanum macrocarpon* (Igbagba), *Amaranthus viridis* (Tete atetedaye), *Crassocephalum crepidoides* (Ebolo), *Solanum nigrum* (Odu), *Solanum Spp.* (Ogumo), *Solanecio biafrae* (Woorowo), *Vernonia amygdalina* (Bitter leaf), *Telfairia occidentalis* (Ugu), *Curcubita pepo* (Elegede) and *Trichosanthes cucumerina* (Snake tomato) selected for the Ni-CanVeg Project were grown together for the first time on the same soil at the recently established On-Station site at the Obafemi Awolowo University Teaching and Research Farm (OAUTRF), Ile-Ife, Nigeria. This site is one of the sixteen sites selected for the Experimental Underutilized Indigenous Vegetables study in the southwest Nigeria.

This particular endeavor provides more opportunities for technical staff, scientists and students to participate in the Project. Asides from being an experimental station, the farm also serves as a field laboratory for teaching and learning.

Some members of Ni-Can Veg Team from Canada with Nigerian counterparts at OAUTRF

A Postgraduate Student, Femi Akinwunmi taking measurement for Soil Moisture Content

The initial problem encountered in the course of establishing the station was lack of sufficient Amaranthus *viridis* (Tete atetedaye), *Crassocephalum crepidoides* (Ebolo) and *Solanum nigrum* (Odu) seeds for planting, which was solved through the establishment of seed multiplication plots.

The vegetables seeds were planted on June 12, 2012. Organo-mineral fertilizer and urea were applied on August 13, 2012 at 40 kg N ha^{-1} each to supply a total of 80 kg N ha^{-1}. This is the lowest rate of fertilizer recommended for amaranth vegetable. Nitrogen fertilizers were applied because of low fertility status of the soil.

An Agronomist observing seed emergence on the field

Nutritionally, the iron content of Elegede leaves was been found to be about three times higher than Ugu leaves. Scientific works are ongoing on the nutritional potentials of Elegede fruits.

NEEM TECHNOLOGY FOR CONTROLING INSECT PESTS OF INDIGENOUS VEGETABLES

Dr. O. K. Adekunle, Associate Professor in the Department of Crop Production and Protection, Obafemi Awolowo University, and a Nematologist on the Ni-Can Veg Project recently had a breakthrough in the use of Neem (*Azadirachta indica*) leaf extracts in controlling winged insect pests of indigenous vegetables on the Obafemi Awolowo University Teaching and Research Farm.

He was among the team of scientists including Dr. (Mrs.) M. K. Idowu (Soil Scientist), Dr. B. J. Amujoyegbe (Agronomist), Prof. D. J. Oyedele (Soil Scientist) and Prof. D. O. Torimiro (Agricultural Extensionist) that established the plots for the ten underutilized indigenous vegetables previously mentioned on the experimental station.

Dr. Adekunle initiated the technology in response to the

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reports received from some of the Ni-Can Veg Project farmers in different locations in Southwestern Nigeria including Ayelaagbe near Oyo town and Iludun Ekiti that winged pests were ravaging their vegetables. He had earlier successfully worked on the use of neem leaf extracts in combating nematodes for his doctoral research. Ordinarily, synthetic insecticides could have been used, but the Ni-Can Veg Project does not encourage usage of synthetic or chemical insecticides on vegetables.

A Plant Pathologist, Dr. Kola Adekunle taking sample of nematode infested soils

It was generally observed that of all the vegetables, Elegede was the most susceptible to attack by pest and . powdery mildew as indicated by presence of insects and White powdery substance observed on the vegetable leave surfaces.

PREPARATION AND APPLICATION OF EXTRACTS

Young neem leaves were collected and rinsed with water. In the laboratory, 10g of the neem leaves were weighed into reagent bottles each containing 100 ml of water and boiled in a water bath at 100°C for five minutes. This is important to ensure that the active ingredient in the leaves are not denatured through overheating . The boiled ingredients were allowed to cool and then sieved to remove the leaves. The neem plant leave extract was applied to the plants at 10% rate, two times at two weeks interval. The powdery colour and the pests disappeared from the plant leaves and the plant looked very healthy thereafter. The neem leaf extract was found to be very effective in controlling the insect pests

Before neem extract treatment

After neem extract treatment

Application of neem extract on the experimental farm

Since the Ni-Can Veg Project farmers do not have weighing equipment or a water bath, they were instructed to fill a clean pot half-way with neem leaves then fill the pot with water and heat it to boiling temperature for five minutes. After cooling, it would be ready for application to the plant using a Knapsack sprayer.

The indigenous vegetable farmers in Iludun-Ekiti, Ayelaagbe and Ilode testified to the effectiveness of the extracts in controlling the insect pests.