

COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH



FOOD RESEARCH INSTITUTE

MICROBIOLOGY DIVISION (Mushroom Unit)

**TECHNICAL REPORT ON THE GRATITUDE TRAINING OF
MUSHROOM FARMERS AT FUYEMPA MUSHROOM FARM, HOHOE
MUNICIPAL ASSEMBLY, 30TH-31ST OCTOBER 2013.**

BY

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INTRODUCTION

Hohoe Municipality, situated in the centre of the Volta Region, with Hohoe as its capital, was created in 1979.

The major food crops cultivated in the municipality are maize, cassava, rice, plantain, cocoyam and yams. Vegetables (okro, tomato and garden eggs) are grown all over the Municipality.

Crops	Cropped Area (Ha)	Average Yield (Ton/Ha)	Total Production (M. Tons)
1.Maize	7,225	2.175	15,714
2.Rice	6,520	3.0	19,560
3.Cassava	8,650	8.6	74,390
4.Yam	1,455	8.3	12,076
5.Cocoyam	205	3.2	656
6.Plantain	645	5.8	37.410

*2009 SRID Estimates Major Crop Production Locations in the Municipality (4)

Cassava is an important starchy staple crop in Ghana with per capita consumption of 152.9 kg/year. Besides being a staple food crop, cassava can be used as raw material for the production of industrial starch, ethanol and recently in the production of beer. The production of cassava in Ghana ranged from 10,217,929 MT to 12,260,330 MT in the period 2007–2009 covering an area of 800,531 ha to 885,800 ha. Ghana currently produces about 12,260,000 MT of cassava annually. Out of this, 8,561,700 MT is available for human consumption while national consumption is estimated at only 3,672,700 MT resulting in surplus of about 4,889,000 MT which can be exploited for the production of industrial starch or ethanol.(1,2)

The cultivation of mushroom serves as the most efficient and economically viable biotechnology for the conversion of lignocellulose waste materials to high quality protein food and this will naturally open up new job opportunities especially in rural areas(3)

OBJECTIVE

- To generate value added products from wastes arising from Cassava and Yam value chains
- Aim-To expand/open new market opportunities for new products developed from the waste of Cassava and Yam

ACTIVITIES

The team from CSIR-Food Research Institute arrived at Hohoe on Tuesday the 29th of October 2013, at 8pm. The next day which was Wednesday 30th October the Team had a meeting at 8am together with Local organizers on how to put logistics together for the training.

The team milled the cassava waste that was provided into the required texture. Then other items like the chairs, generator etc were organized to the site of training. In the evening of the same day nine participants from outside Hohoe arrived in their hotel.

The course started on Wednesday the 31st of October at 9.30am with sixteen participants comprising of mushroom farmers from Hohoe, Kadjebi, Guaman and Akpafu. The venue was Fuyempa mushroom farm. The farmers underwent registration, and introduced themselves. At 10.30am, Mr. Takli took the participants through the steps of composting which they finished at 11.30am. After that Matilda Dzomeku gave a lecture which included the general introduction to mushrooms, the nutritional and medicinal values of mushrooms, the six steps involved in the plastic bag method, and substrate formulation of the Gratitude method.

At 1pm the participants had lunch break and continued with the practical of the plastic bag method at 1.45pm and this was handled by Mr. Takli. The participants participated fully and this ended at 3.30pm. This was followed by questions. The participants then filled the evaluation forms and a group picture was taken. The course was then formally brought to a close at 4.25pm.



Milling of the cassava waste prior to the training



A section of the participants during lectures



Participants on the field



Participants on the field



Participants learning how to weigh the substrates (sawdust)



Participants learning how to weigh the substrates (cassava waste)



Participants having theoretical lessons



Participants practicing the mixing of compost in preparation for the Bagging process



Participants practicing the bagging of the compost using the plastic bag method



Participants learning how to stack the prepared compost bag into the oil drum for sterilization process.



Compost bags produced by participants



Group picture of participants and resource persons.

PARTICIPANTS LIST

No	Name	Location of farm	Tel No	Contact Address	Email address
1.	Koklohor Dodzi	Kadjebi	0246653621/ 0208588182	Box 121 Kadjabi- Akan	
2.	Bright Mensah Tsordzime	Kadjebi	0242559127/ 0200693803	Box 121 Kadjebi- Akan	
3.	Dorm Moses	Kadjebi	0247451394/ 0548718289		
4.	Kuzah Daniel	Kadjebi	0547174168/ 0207970136		
5.	Nelson Agbatornu	Kadjebi	0242710817/ 0200306088		
6.	Krasah Daniel	Kpando	0205891407		
7.	K. Asare-Baffour	Guaman	0200888041	Box 108 Jasikan	wofabeng@gm ail.com
8.	Elizabeth Donko	Guaman	0200906091	P.O.Box 129 Jasikan	
9.	Agbanyo Valeria	Akpafu Mempeasem	0541346565	P.O.Box 8	
10.	Agbodzi Ike Sebastian	Hohoe	0209991956	Box 472 Hohoe	Sebastino32@ yahoo.com
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14.	Michael Yigah	Hohoe	0244144813	Box 185, Hohoe	fuyempa@gmail.com myigah@yahoo.com
15.	Simpi P.K	Hohoe	0208826681	c/o Box 3, Hohoe	
16.	Ruth Niedemueller	Hohoe	0541829606	Box 472, Hohoe	Ruth.niedemueller@giz.de

EVALUATION OF COURSE BY PARTICIPANTS

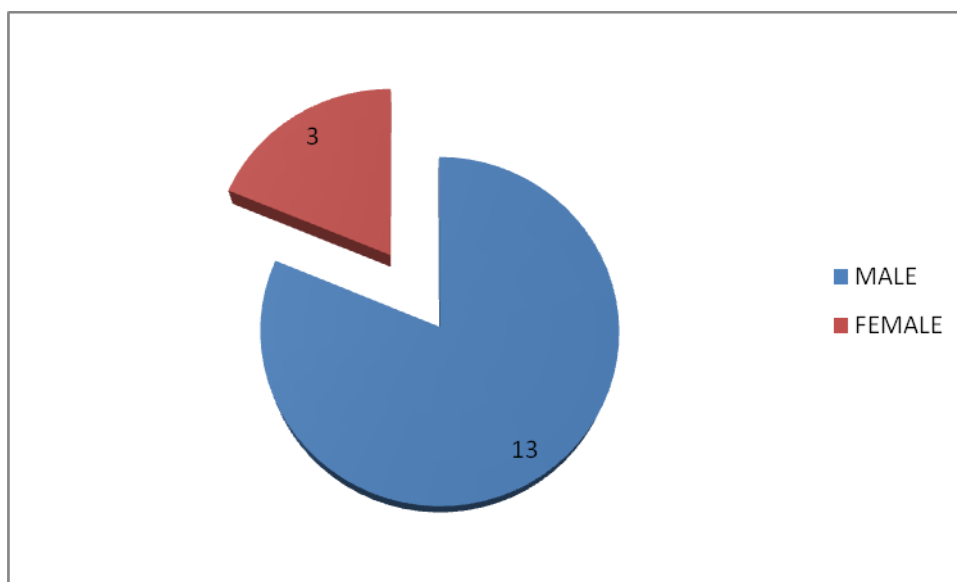


Fig. 1 Pie chart showing the distribution of course participants with regards to gender.

Participants were very excited to go and experiment on the use of cassava waste as an additional substrate for the cultivation of mushrooms. They also advised that future workshops should be for a week so they can have more practice done.

REFERENCE

1. MoFA, Facts and Figure, Agriculture in Ghana, Ministry of Food and Agriculture, Accra, Ghana, 2009.
2. S. Adjei-Nsiah and O. Sekyi-Dawson, Promoting Cassava as an Industrial Crop in Ghana: Effects on Soil Fertility and Farming System Sustainability. Applied and Environmental Soil Science Volume 2012 (2012).
3. C.I Onouha and U. Uchechi and B.C Onouha, Cultivation of Pleurotus Pulmonarius (Mushroom) Using Some Agrowaste Materials. Agricultural Journal, Volume: 4, Issue: 2 Pages: 109-112.
4. www.mofa.gov.gh