

GHANA SCIENCE ASSOCIATION



16TH BIENNIAL WORKSHOP ANNOUNCEMENT

THEME:

Combating Pests through Climate Smart Agriculture

VENUE

**Kwame Nkrumah University of Science and Technology,
Kumasi**

DATE

THURSDAY, 16TH AUGUST 2018

The 16th Biennial Workshop of the Ghana Science Association will be held in collaboration with stakeholders on *Thursday, 16th August 2018*. The theme for the workshop is

“Combating Pests through Climate Smart Agriculture”

BACKGROUND

In the wake of climate change globally, food security has become a matter of concern. Rainfall patterns have been altered, making it difficult for farmers to rely on rainfall for planting their crops. Expensive methods of irrigation have been adopted by farmers and the cost trickles down to consumers, making food expensive.

Despite tremendous improvements in technology and crop yield potential, food production remains highly dependent on climate, because solar radiation, temperature, and precipitation are the main drivers of crop growth.

Plant diseases and pest infestations, as well as the supply of and demand for irrigation water are influenced by climate. Climate change affects the distributions and life cycles of animals and insects such as pests, disease-causing organisms, crop-pollinating insects and animals. Most pests have developed resistance to most pesticides used to control them. These pesticide resistant pests destroy plantations and thereby reduce food production. The control of these pests call for stronger and very toxic chemicals as pesticides, which destroy the environment and enter the food chain, causing various types of diseases in both humans and livestock.

There is evidence that climate change is altering the distribution, incidence and intensity of animal and plant pests and diseases as well as invasive and alien species. The recent emergence in several regions of multi-virulent, aggressive strains of wheat yellow rust adapted to high temperatures is a good indication of the risks associated with pathogen adaptation to climate change. These new aggressive strains have spread at unprecedented speed in five continents resulting in epidemics in new cropping areas, previously not favorable for yellow rust and where well-adapted, resistant varieties are not yet available. The wheat disease Spot Blotch, caused by *Cohliobolus sativus*, is another example, causing heavy losses in Southern Brazil, Bolivia, Paraguay, and Eastern India, due to a lack of resistance to the disease. As wheat growing areas of Asia become warmer, the pathogen is likely to spread even further and cause further losses.

In recent times, the fall army worm invaded over twenty African countries including Ghana and destroyed maize plantations and other crops, running into billions of dollars and putting hundreds of millions of people at risk of hunger. The fall army worm, which originates from North America travels 2000km each year in search of warmer climates. The worm is averse to the harsh winter of North America and so returns to tropical habitats in autumn. Several attempts at using pesticides to control the pests proved futile with just a few chemicals being able to kill the pests without destroying the crops.

Biological control using *S. exempta nucleopolyhedrovirus* (SpexNPV), a naturally occurring biological control agent; and validation of neem extracts, a locally available botanical agent, has been used successfully in Tanzania to combat the worm infestation.

Climate smart agricultural practices, which involve the use of combined technologies and practices used to combat the more unpredictable conditions and resulting impacts caused by climate change may be explored as a more efficient way of combatting pest instead of the current use of hazardous chemicals which have detrimental effects.

The Ghana Science Association through this workshop intends to create a platform for scientists, technologists and stakeholders to exchange ideas to arrive at practical ways of solving the issue of pest infestations and their impact on the national economy.

The role of government is paramount in achieving all these, however, support is also needed from stakeholders, NGOs, farmers, the press and the general public to achieve this.

SUGGESTED TOPICS

1. Impact of increased chemical use to fight pests on human health and the environment.
2. Pesticide residues in food stuffs and their impact on human health, the environment and the national economy.
3. Climate Smart Agricultural practices and food security.
4. Local options and sustainable approaches to solving issues of agricultural pests and diseases.
5. The effect of climate change on Agriculture.
6. The role of Government, NGOs, the scientific community and other stakeholders in establishing and mainstreaming appropriate policies on Climate Smart Agriculture.

PARTICIPANTS

- Scientists and Technologists
- Research Institutes
- Policy makers
- Government institutions
- Personnel from agrochemical industries
- Environmentalists
- Farmers
- Veterinary officers
- Agricultural extension officers
- Parliamentary select committees on Agriculture
- Traditional rulers
- Students from tertiary institutions
- Press
- NGOs and Donor Agencies
- Religious organizations
- General public
- Universities
- Civil Society Organizations (CSOs) and Farmer Base Organization's (FBOs)

REGISTRATION

Registration Fee	Members (GH¢)	Non Members (GH¢)	Students (GH¢)
On/before 20 th July 2018	100.00	150.00	50.00
After 20 th July 2018	120.00		60.00

NB: These fees cover lunch, snack and workshop materials only

ACCOMMODATION

Please note that accommodation would **NOT** be arranged for participants but the following are some hotels near **KNUST** and rates:

NAME	LOCATION	RATE PER NIGHT	MEAL PROVIDED	CONTACTS
SMS GUEST HOUSE	NEAR ENGINEERING GUEST HOUSE	STANDARD: GHC 80-100	BREAKFAST	0322060353
TRESURE LAND HOTEL	BEHIND THE TECH POLICE STATION	SINGLE: GHC 60 TWIN: GHC 75 DOUBLE: GHC 85 DOUBLE DELUXE: GHC 90 EXECUTIVE: GHC 100	BREAKFAST	0322061010 0322061011 0322061012 0322061015
KCCR GUEST HOUSE	BEHIND GUSS HOSTEL (BRUNEI)	STANDARD : GHC 150	BREAKFAST	0322060351
GUSSS/GRADUATE /CREDIT UNION HOSTELS	KNUST-CAMPUS	GHC 25-50	NONE	CU:0504210099
NODA	FUMESUA	STANDARD: 387 TWIN: 473 KITCHENET: 516 MINI SUITE: 516 EXECUTIVE SUITE: 602 FAMILY ROOM: 688	BREAK FAST PARKED LUNCH: GHC 15 SNACKS: GHC 12	0242559179
MYSTICAL ROSE	BOADI	STANDARD: 100-120	BREAKFAST PARKED LUNCH: GHC 15 SNACKS: GHC 12	0322061996
D'JAYS HOTEL		STANDARD: 60, 80, 90, 95, 110	BREAKFAST	0208185894
PRESIDENTIAL SQUARE HOTEL	BOMSO	STANDARD: 80, 120, 150	No Breakfast	024 591 7267
AUGIES HOTEL	AHINSAN ESTATE			0322025854 0244620034
KINGS TOWERS	AHINSAN ESTATE	STANDARD: 150, QUEEN GUEST ROOM: 200, TWIN BED: 220	BREAKFAST	026 573 7917

Please call for enquiries about Accommodation.

REQUIREMENTS

Those wishing to participate are requested to indicate so by completing the attached **Booking Form** and return to the Scientific Coordinator **not later than 20th July, 2018**.

Alternatively, you could pay into Ghana Science Association's Account No. 1031130000385 Ghana Commercial Bank, Legon Branch and present the pay-in-slip to GSA Secretariat, Airport Residential Area /Accra or at the registration desk. You could also E-mail the scanned copy to gsa@ug.edu.gh

Please address all enquiries and correspondence to:
THE SCIENTIFIC COORDINATOR
GHANA SCIENCE ASSOCIATION SECRETARIAT
P. O. BOX LG 7, LEGON

Email: - gsasecretariat@gmail.com
gsa@ug.edu.gh
 Tel: - 0302-732605 or 0244876965 or 0244986310
 Website - www.ghanascience.org.gh

Please visit the website for more details about the Workshop. Registration / Booking form can be downloaded from the website.

**GHANA SCIENCE ASSOCIATION
16th BIENNIAL WORKSHOP**



THEME: Combating Pests through Climate Smart Agriculture

VENUE: Kwame Nkrumah University of Science and Technology,
Kumasi

DATE: THURSDAY, 16TH AUGUST 2018

REGISTRATION FORM

Name:
(Prof., Dr., Rev. Mr. Mrs. Ms.)

Address:

Email:.....

Tel:

Registration Fee paid GH¢ _____

Signature: Date:

OFFICE USE ONLY

Amount Received

CHEQUE

CASH

Remarks:.....

Signature: Date