

**RECORD SECTION**

**Ministry of Agriculture, Fisheries and Agrarian Reform**  
Bangsamoro Autonomous Region in Muslim Mindanao

**TRACKING FORM**Control No.: 07-773

(Do not detach from Records Section's File Copy)

Name and Agency of Sender/Recipient:

Akmad A. Abdullah, Samson M. Buca, Jamil K. Aliman and Raiman S. Maguid

Document Title/Subject:

MO No. 051-07 Validation Corn Area Pest Infestation at Datu Hopper, Maguindanao

Type of Transaction:		Date	Time	Released by Records Section:		Date	Time
Released		28/07/2021	9:50 am	Sittie Almira Ali		28/07/2021	10:00 AM
No.	SIGNATURE OVER PRINTED NAME	DIVISION/SECTOR/UNIT SERVICES	DATE	TIME	REMARKS		
					Departure(Date&Time)	Arriving (Date&Time)	
1	JAMIL ALIMAN	REG. & Quarantine	07-28-21	10:00		(D)	
2							
3							
4							
5							



Republic of the Philippines  
Bangsamoro Autonomous Region in Muslim Mindanao  
**MINISTRY OF AGRICULTURE, FISHERIES AND AGRARIAN REFORM**  
Bangsamoro Government Center, Gov. Gutierrez Ave., Rosary Heights VII, Cotabato City, 9600



MEMORANDUM

Order No. 051-07  
Series of 2021

TO : **AKMAD A. ABDULLAH**  
Corn Program Assistant/ Senior Agriculturist

**SAMSODIN M. BUCA**  
Pest surveillance and Monitoring Officer

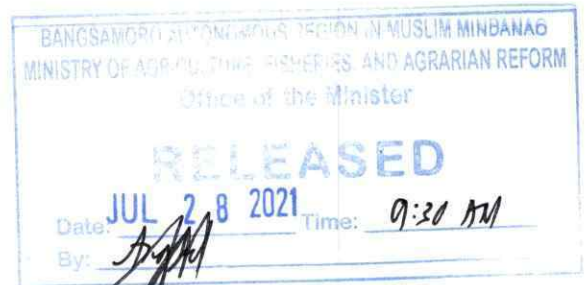
**JAMIL K. ALIMAN**  
GEO-Tagging Officer

**RAIMANA S. MAGUID**  
RQD Staff

FROM : **THE MINISTER**

DATE : July 27, 2021

SUBJECT : **Validation in Corn Area Pest Infestation at Datu Hopper, Maguindanao**




The above-mentioned MAFAR employees are hereby directed to undertake official travel on July 29 - 30, 2021 to validate reported infestation on corn plants and result of pest monitoring and surveillance as reflected in the pest monthly bulletin published by the Bureau of Plant Industry Manila, in Brgy. Tuayan, Datu Hopper, Maguindanao, BARMM Region.

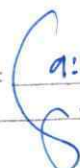
Anent to this the Regulatory Division extend control measures to suppress insect pest through pesticide distribution and application to the respective affected farmers.

This memorandum shall serve you as **travel order**.

For information and STRICT COMPLIANCE

  
**MOHAMMAD S. YACOB, Ph.D.**  
Minister

MINISTRY OF AGRICULTURE, FISHERIES AND AGRARIAN REFORM  
RECORDS SECTION  
**RELEASED**

2021 -07- 28  
Time: 9:50PM  
By: 



Republic of the Philippines  
Bangsamoro Autonomous Region in Muslim Mindanao  
**MINISTRY OF AGRICULTURE, FISHERIES AND AGRARIAN REFORM**  
Bangsamoro Government Center, Gov. Gutierrez Ave., Rosary Heights VII, Cotabato City, 9600



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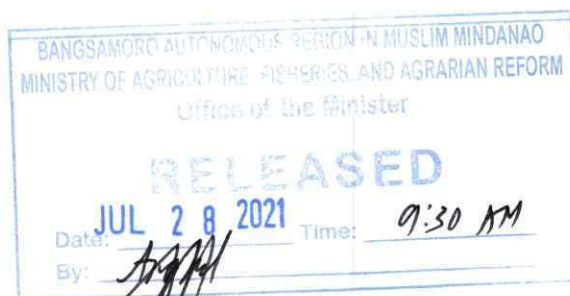
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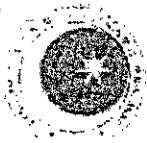
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BARMM Compound, Gov. Gutierrez Ave., RH-7, Cotabato City, Philippines, 9600



**MEMORANDUM ORDER**

No. 048-07  
Series of 2021

**TO: ENGR. ISMAIL A. GUIAMEL**  
Director II, Agriculture Services

**RONJAMIN M. MAULANA, Ph.D**  
Provincial Head, MAFAR-Maguindanao

**Cc: JAMER GUIMBA**  
Chief, Regulatory Division

**FROM: MINISTER**

**DATE: July 12, 2021**


**SUBJECT: Pest Advisory on Corn Pests and Diseases in Maguindanao**

In reference to the **Corn Pest Monthly Bulletin** of Bureau of Plant Industry-Crop Pest Management Division (BPI-CPMD) for the month of June 2021, and based on the result of the data analysis on research project titled "**Development of Early Warning System and Database Management of Corn Arthropod Pest and Diseases in the Bangsamoro Autonomous Region in Muslim Mindanao**" funded by the Bureau of Agricultural Research (DA-BAR) in collaboration with Bureau of Plant Industry-Crop Pest Management Division (BPI-CPMD), you are hereby advise to disseminate information generated to alert corn farmers on crop protection and management.

Take note also of the **Leaf spot** as recorded alarming disease with moderately severe damage observed in Tuayan, Datu Hoffer, Maguindanao.

Attached are the profile of corn arthropod pest and diseases, and the management options for the betterment of the farming communities in the region.

For reference.

  
**MOHAMMAD S. YACOB, Ph.D.**  
Minister

Time: 2:44 PM

Sy: S

# PEST ADVISORIES FOR CORN IN THE BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO

**Location: DATU HOFFER AMPATUAN, MAGUINDANAO**

## INSECT PESTS

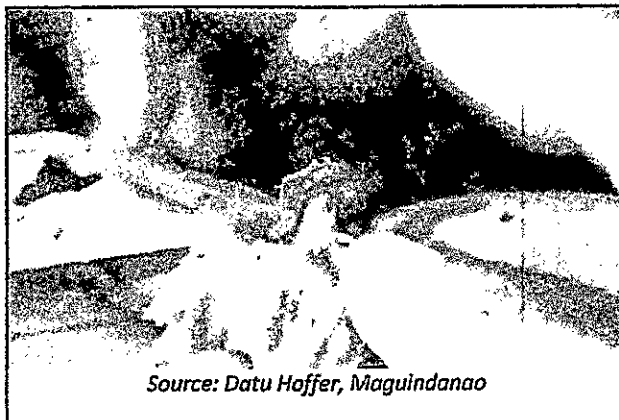
**Common Name:** Fall Armyworm (FAW)  
**Order/ Family:** Lepidoptera: Noctuidae  
**Scientific Name:** *Spodoptera frugiperda*

### Stages of Development:

Eggs: 2-3 days  
Larva: 14-22 days (6 larval instars)  
Pupa: 8-30 days  
Adult: 10-22 days

### Damage Characteristics:

Feed on whole plant above soil level



Source: Datu Hoffer, Maguindanao

### Management Strategies:

- Ploughing under corn stubbles after harvest
- Strictly follow synchronous planting
- Field sanitation
- Hand picking
- Release of *Trichogramma chilonis* at different intervals
- Release of Earwig, *Euborella sp.* at different intervals
- Application of *Metarhizium sp.* at different intervals
- Application of FDA approved and recommended insecticide with contact and stomach activity

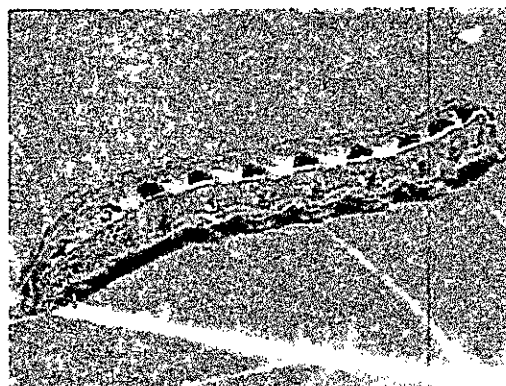
**Common Name:** Common Cutworm  
**Order/ Family:** Lepidoptera/ Noctuidae  
**Scientific Name:** *Spodoptera litura* Fabricius

### Stages of Development:

Eggs- 2-3 days  
Larva- 20 days  
Pupa- 8-11 days  
Adult- 5-7 days

### Damage Characteristics

Young corn plants may be completely defoliated, cut stem and leaves including veins and midribs almost consumed.



Source: Datu Hoffer, Maguindanao

### Management Strategies:

- Plow fields to remove weeds which may serve as alternate hosts
- Use light traps or sex pheromone traps for monitoring
- Practice crop rotation
- Plant Bt corn hybrids
- Release of Braconid egg parasitoid
- Spray nucleopolyhedrosis virus (NPV)
- Use pyrethroids, carbamates, and organophosphates
- Collection and crush egg masses and early larval stages

- Frequent rainfall
- Infected leaves on soil
- Warm temperature ranging from 22°C to 30°C

#### Management Strategies:

- Use varieties against this fungus (resistant varieties)
- Field sanitation (clean plowing, remove infected debris and decayed plant parts)
- Balance soil fertility
- Low plant populations
- Crop rotation
- Importance in irrigation system

Disease Name: **Leaf Blight**

Causal Type: **Fungi**

Scientific Name: *Diplodia macrospora* Earle

#### Crop Stage of Corn Affected:

Vegetative and post flowering stage

#### Favorable Environmental Condition:

- Dry conditions in the early stage
- Warm wet environment at 2-3 weeks after silking (promote disease development)
- High nitrogen and low phosphorus levels
- High plant density and short planting distance

#### Management Strategies:

- Use varieties or hybrid seeds with at least moderate resistance
- Deep plowing and field sanitation, it helps in reducing the initial source of inoculum
- Use of fungicides

Disease Name: **Brown spot**

Causal Type: **Fungi**

Scientific Name: *Physoderma maydis*

#### Crop Stage of Corn Affected:

Leaf, leaf sheath and stalk

#### Favorable Environmental Condition:

- Flooded field
- Strong winds
- Warm temperature

#### Management Strategies:

- Field sanitation
- Crop rotation
- Tillage
- Foliar fungicides labeled for *Physoderma* brown spot

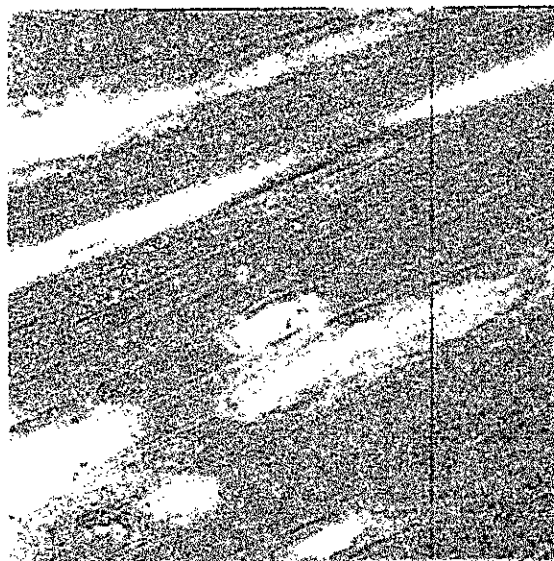


Image source: <https://www.ars-grin.gov/hortus/corn/leaf-blight.html>

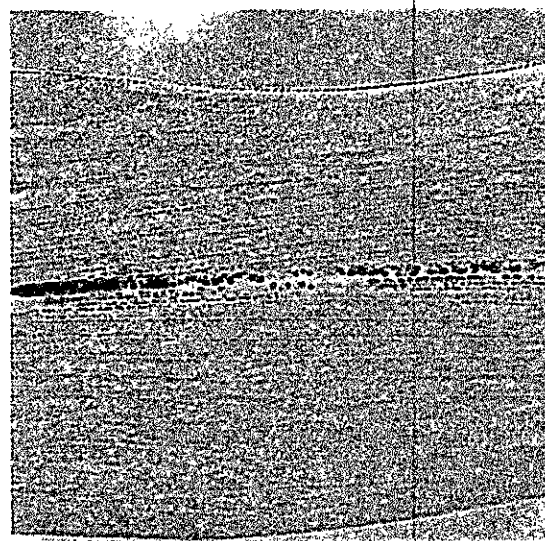


Image source: <https://cropprotectionnetwork.org/resources/articles/diseases/physoderma-brown-spot-of-corn>

**Common Name:** Corn Planthopper  
**Order/ Family:** Hemiptera: Delphacidae  
**Scientific Name:** *Stenocranus pacificus* Kirkaldy

**Stages of Development:**

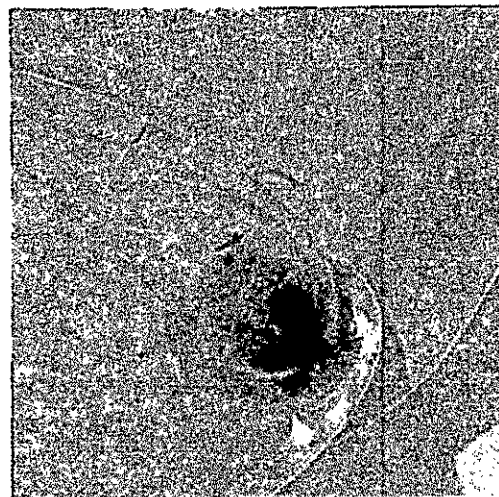
Egg: 4-10 days

Nymph: 16 days

Adult: 2-27 days (winged male), 3-18 days (wingless male); 7-14 days (winged female), 8-39 days (wingless female).

**Damage Characteristics:**

Drying up of leaves due to sucking. Blackening of leaves due to sooty molds. Hopper burn bug when infestation level is very high.



Source: Datu Hoffer, Maguindanao

**Management Strategies:**

- Practice fallow period, if crop rotation is not possible (other non-graminaceous crop) this is to break the cycle of the planthoppers
- Plow under or burn corn stubbles or plant debris immediately after harvest to kill remaining eggs, nymphs and some adults
- Follow recommended fertilizer requirement and split nitrogen application. Excessive use of nitrogen-based fertilizers makes plant susceptible and attractive
- Increase planting distance enough to sunlight to penetrate (shady areas favorable to planthoppers)
- Intercrop leguminous plants as refuge for natural enemies, soil conditioner and added income
- Planthopper eggs are parasitized by fairy wasp (*Anagrus sp.*)
- Mirid bugs (*Cyrtorhinus lividipennis*) prey on eggs
- Dragon flies and damselflies prey on moving adults
- Spider prey on nymphs and adults
- Seed treatment with neonicotinoids, organophosphates and carbamates

**DISEASES OF CORN**

**Disease Name:** Leaf Spot

**Causal Type:** Fungi

**Scientific Name:** *Cercospora zeae-maydis* Tehon & E.Y. Daniels

**Crop Stage of Corn Affected:**

Flowering stage, fruiting stage and vegetative growing stage

**Affected Plant Parts:**

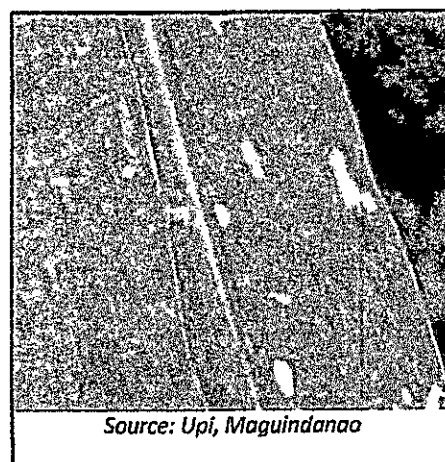
Fruit- reduced size

Leaf- abnormal colors, yellowed or dead, necrotic areas, fungal growth

Seed- Shriveled

Stem- lodging, broken stems

Whole plant- early senescence, plant dead, dieback



Source: Upi, Maguindanao

**Favorable Environmental Condition:**

- High humidity (90% to 98%)





# CORN PEST MONTHLY BULLETIN

June 2021

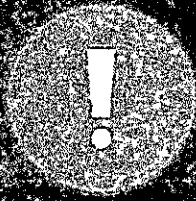
Volume 1, Issue No. 6



## TOTAL ACTIVE DATA

9,814

as of June 30, 2021 | 8:00 pm



## NO. OF ALARMING SITES

5

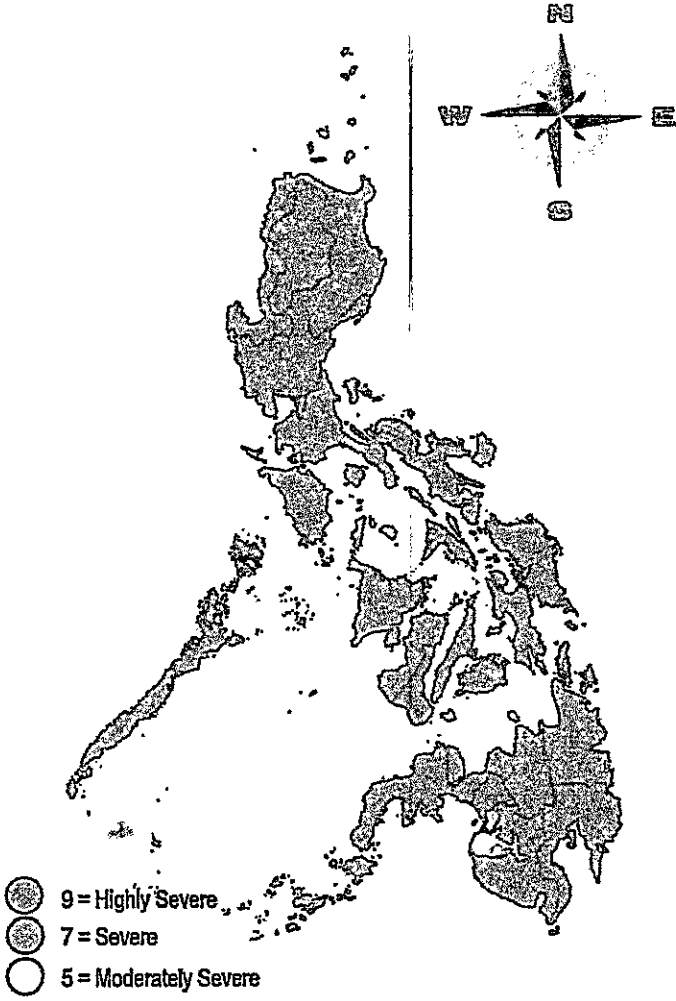
as of June 30, 2021 | 8:00 pm

### TOP THREE (3) MAJOR ARTHROPOD PEST

1. Fall Armyworm - 10.20 %
2. Cutworm - 2.48 %
3. Corn Planthopper - 2.28 %

### TOP THREE (3) MAJOR DISEASES

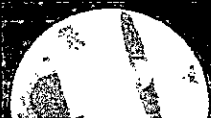
1. Leaf Spot - 6.06 %
2. Leaf Blight - 2.41 %
3. Brown Spot - 1.45 %



SEVERITY	% INCIDENCE (REGIONAL LEVEL)	ALARMING PEST/ ALARMING DISEASES	NO. OF ALARMING SITES/LOCATION	REGION	PROVINCE	MUNICIPALITY	BARANGAY	FARM ID
5	20.76	Leaf Spot	5	BARMM	MAGUINDANAO	DATU HOFFER AMPATUAN	TUAYAN	15801456015
			5	BARMM	MAGUINDANAO	DATU HOFFER AMPATUAN	TUAYAN	15801456016
			5	BARMM	MAGUINDANAO	DATU HOFFER AMPATUAN	TUAYAN	15801456017
			5	BARMM	MAGUINDANAO	DATU HOFFER AMPATUAN	TUAYAN	15801456018
			5	BARMM	MAGUINDANAO	DATU HOFFER AMPATUAN	TUAYAN	15801456021

### RECOMMENDATIONS

- Alert staff to monitor nearby areas with high infestations of recorded pest.
- Give technical assistance and disseminate pest advisories to farmers.



### ANNOUNCEMENT

What's Done and Done, Mungim, Monthly Monitor