



MONTHLY AGRO-METEOROLOGICAL BULLETIN

Vol. 6 Issue 4

July 2017

May to July 2017 Forecast – Rainfall totals were uncertain for that season with no significant change from the normal amount of wet days. Above to normal temperatures were also forecast.

May to July 2017 Observation – The Douglas-Charles Airport recorded normal rainfall total with above normal temperatures while the Canefield Airport recorded below normal rainfall with above normal maximum temperatures and normal minimum and average temperatures. The total number of wet days were normal at both stations.

August to October 2017 Forecast— Above to normal rainfall totals and air temperatures are forecast with no significant change in the frequency of wet days.

SUMMARY FOR JULY 2017

- Tropical waves dominated the weather conditions for the month.

- Slightly dry to normal conditions were observed across the island for the month of July 2017.

- Total rainfall days were normal at both stations.

- A dry spell was recorded from the 8th to the 10th at the Douglas-Charles Airport while a 6-day dry spell from the 7th to the 12th and a 3-day dry spell from the 26th to 28th was recorded at the Canefield Airport.

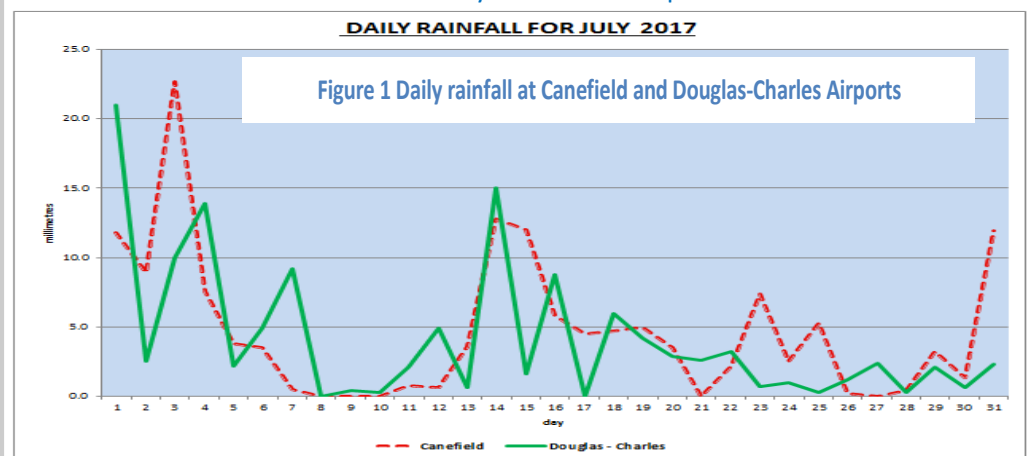
- The average air temperature was above normal at both stations.

- The weather conditions experienced during the month of July was favourable within the farming communities.

- Crops harvested for the period were dasheen, yams, tannia, sweet potatoes, plantain, bananas, vegetables, limes, passion fruits, and coconuts.

Parameter (July 2017)	Canefield Airport	Douglas-Charles Airport
Rainfall Total	146.5mm (below normal)	127.2mm (below normal)
Normal	218—315.1mm	199.1—273.2mm
Wettest day	3rd (22.7mm)	1 st (21.0mm)
Wet Days (≥1.0mm)	21 days	22 days
Average Temperature	29.3°C	29.2°C
30 year average	28.9°C	28.6°C
Highest Maximum Temperature	34.0°C (27 th)	32.1°C (24 th & 25 th)
Lowest Minimum Temperature	23.0°C (8 th , 17 th & 30 th)	23.7°C (9 th)
Average Relative Humidity	75%	74%
Maximum wind gust	31km/h (17 th)	63km/h (2 nd)
Average daily sunshine hours	-	9hrs
Normal		7hrs 24mins

Table 1: July 2017 weather parameters



- Some crops established were vegetables and root crops.

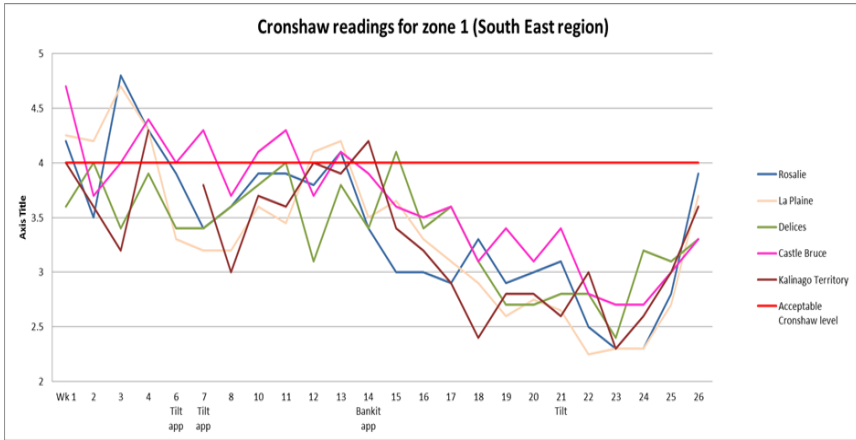
-The sale of citrus seedlings began. Farmers began purchasing their tree crop seedlings from the agricultural stations.

- Livestock farmers are continuing slaughter of their birds and pigs primarily for the abattoir. Small ruminants farmers continue to treat their sheep and goat for worms and ticks. Apiculture farmers reported lower yields compared to this time last year.

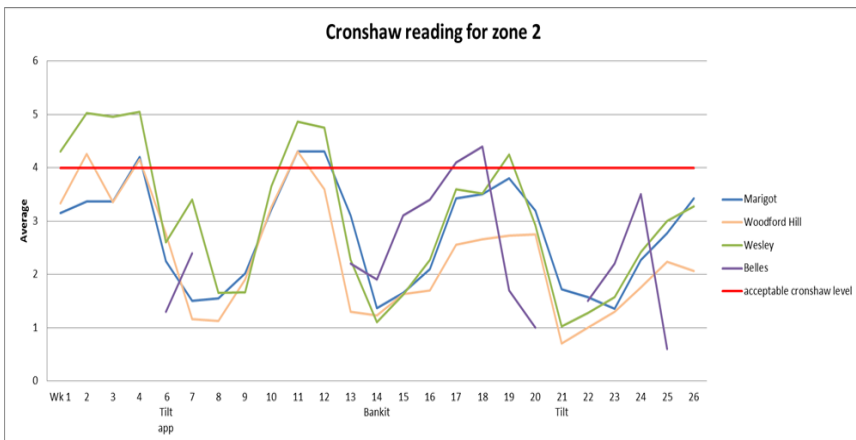
SUMMARY FOR JULY 2017 CONT.

An update on the Black Sigatoka Management Project.

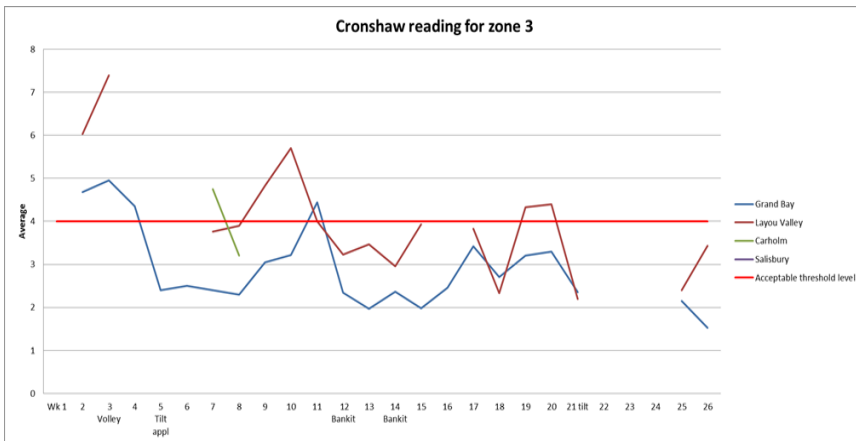
The four zones being monitored for the past 25 weeks are showing positive signs of reduced disease pressure.



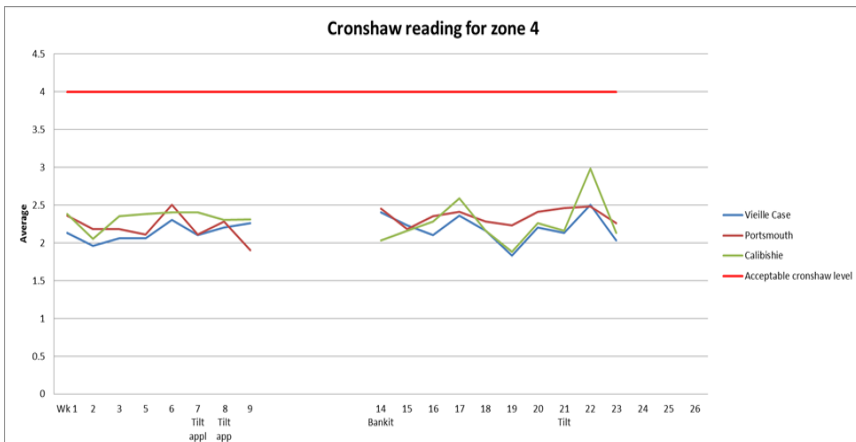
Graph 1 depicting Cronshaw readings in the South East and East regions. **A threshold of 4 is the acceptable Cronshaw level and is represented by the area below the red line.** Above the Cronshaw level of 4 a spray cycle must be considered. Readings above 4 indicates poor BSD control. Graph also indicates weeks of fungicide application (Wk 6,7, 13 and 21). After the application of fungicides it was noticed that Cronshaw readings dropped below the threshold level of 4. Weeks not represented indicate that no data was presented.



Graph 2 depicting Cronshaw readings in the North East regions and Belles. The threshold level is represented by the bold red line. Graph indicates weeks of fungicide application (Wk 6, 7 and 14 and 21). After the application of fungicides it was noticed that Cronshaw readings dropped below the threshold level of 4.



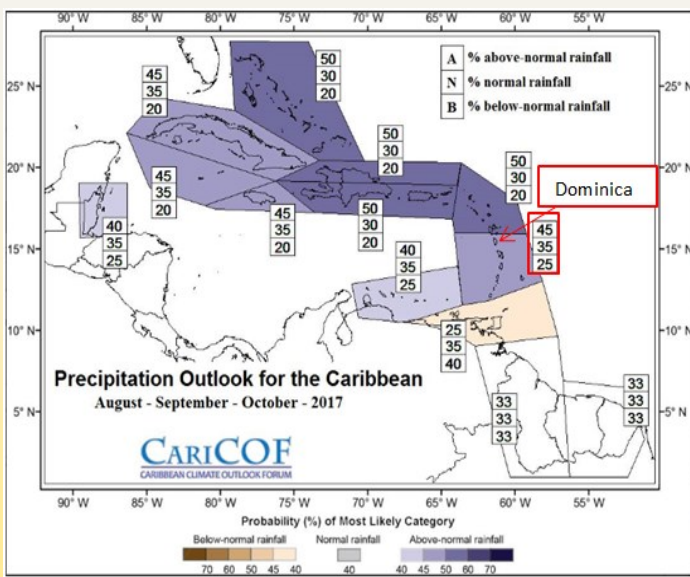
Graph 3 depicting Cronshaw readings in the South and Central regions. The threshold level is represented by the bold red line. The Graph also indicates weeks of fungicide application (Wk 3,5,12 and 21). Grandbay trend (the blue line) is clearly observable for the thirteen weeks due to excellent data collection. Whereas the trend for Salisbury (purple line) and Carholm (green line) is not observable due to lack of data.



Graph 4 depicting Cronshaw readings in the north region. The threshold level is represented by the bold red line. Graph indicates weeks of fungicide application (Wk 7, 14, and 21). The trend is clearly observable for the period. The observed trend for zone 4 is recommendable. Between weeks 9 and 14 the officer was on sick leave.

SEASONAL FORECAST FOR AUGUST-SEPTEMBER-OCTOBER 2017

Rainfall Outlook



Forecast:

⇒ Above to normal rainfall totals are forecast.

Probability for August to October 2017

- 45% chance of above normal
- 35% chance normal
- 25% chance of below normal

⇒ An increase in the number of wet days ($\geq 1.0\text{mm}$) (*medium to high confidence*), while 7-day wet and very wet spells (*low confidence*) and 3-day extremely wet spells are forecast to be normal.

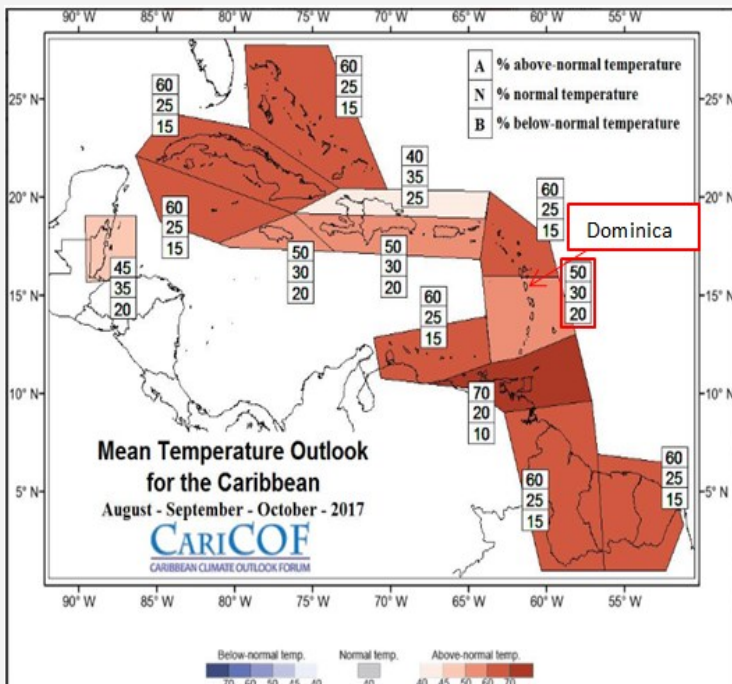
⇒ Drought conditions are not expected for the season.

Temperature Outlook

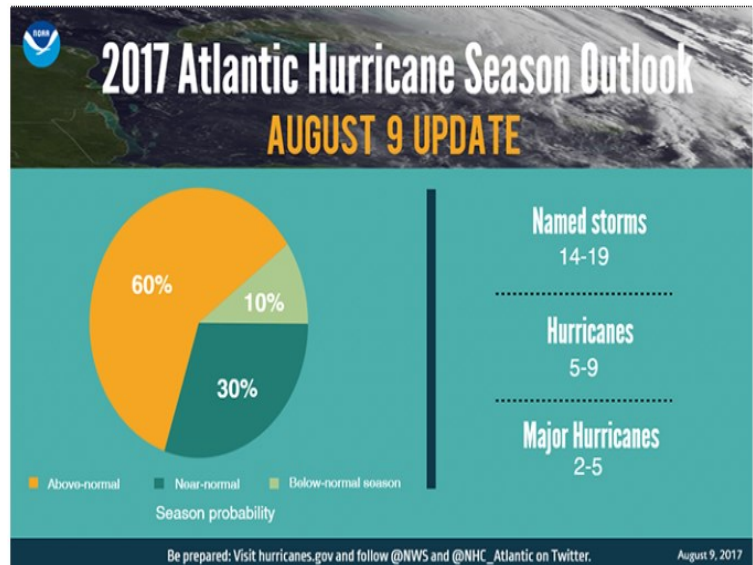
The chances for above to normal temperatures are higher for the season August to October 2017. This includes daytime highs and nighttime lows. Heat waves is also a concern for this season.

Mean temperature probability for August to October 2017

- 50% chance of above normal
- 30% chance normal
- 20% chance of below normal



2017 Hurricane Season Outlook Update



Atlantic hurricane names in 2017

ARLENE	LEE
BRET	MARIA
CINDY	NATE
DON	OPHELIA
EMILY	PHILIPPE
FRANKLIN	RINA
GERT	SEAN
HARVEY	TAMMY
IRMA	VINCE
JOSE	WHITNEY
KATIA	

August-September-October Climatology

August-September-October Season (ASO) NORMAL (1982-2017)		
RAINFALL		
	CANEFIELD AIRPORT	DOUGLAS-CHARLES AIRPORT
Normal	595.6 to 714.6mm	766.3 to 968.7mm
Normal Wet Days	45 to 61 days	57 to 70 days
TEMPERATURE		
Average Maximum Normal	31.4°C to 31.9°C	30.4°C to 31.1°C
Average Mean Normal	27.6°C to 28.1°C	27.2°C to 27.7°C
Average Minimum Normal	23.7°C to 24.1°C	24.0°C to 24.2°C

Table 2: August to October summary

CLIMATE SUMMARY FOR AUGUST

Parameter	Canefield Airport	Douglas-Charles Airport
Rainfall normal	181.1 to 271.5mm	203.6 to 257.2mm
-highest total	539.4mm (2007)	457.3mm (2010)
-lowest total	102.0mm (1984)	80.1mm (1984)
Temperature	28.9°C	28.8°C
-maximum	35.4°C (2005)	34.3°C (1996)
-minimum	21.7°C (1996)	20.9°C (1992)
Chance of 5 day dry spell	40%	10%
Chance of 10 day dry spell	0%	0%

Table 3: August monthly summary

MOON PHASES



CLIMATE-SMART ADVISORIES

- Above to normal rainfall is beneficial for rain fed plants. Soil moisture is expected to be adequate for the season.
- Expected high temperatures can result in increased evaporation and wilting. Low productivity may also arise from high temperatures.
- With high chances of increased temperatures (both day and night) heat stress is a likely factor to consider from heat waves. Continue to guard against heat stress not only in humans but also livestock and crops.

HURRICANE PREPAREDNESS TIPS

Normally increased tropical cyclone activities occur during the season August-September-October with the peak of the season being in September.

Farmers are urged to stay tuned to weather information issued by the local authorities daily especially as there is a higher chance for increased tropical cyclone activities this year.

Farmers who live in disaster prone areas namely; near river ways, coastal areas and areas prone to flooding and landslides should have a disaster plan in place.

BEFORE a system, farmers should identify a safe shelter and a route to get there. Farmers should also stock up on emergency supplies including food, water, protective clothing, medications, batteries, flashlights, important documents, road maps and a full tank of gasoline.

DURING a system, farmers need to listen to local authorities on radio. If forced to weather a storm, farmers should get inside the most secure building possible and stay away from windows. Remember that a lull often signifies the storm's eye—not its end. Farmers riding out a hurricane sometimes are in a rush to visit their farms, however, it is advisable that they should wait for authorities to announce that the danger has passed.

Agromet bulletins from across the region can be accessed via <http://rcc.cimh.edu.bb/climate-bulletins/agriculture/>. **National bulletins:** <http://divisionofagriculture.gov.dm/publications/agro-meteorological-bulletin>

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