Issue: 30

June, 2015

This bulletin is prepared by the Hydrometeorological Service of Guyana. We welcome feedback, suggestions and comments on this bulletin. Correspondences should be directed to: The Chief Hydrometeorological Officer (Ag), and the Agronomist.



Hydrometeorological Service of Guyana

Farmer's Monthly Weather Bulletin

HIGHLIGHTS

- Guyana was classified as Very Wet (VW) for the month of May 2015.
- Region 6 recorded the lowest average rainfall total for the month of May with a total of 273.3 mm of rainfall with 18 rain days.
- The highest one day rainfall total was recorded at Mon Repos Region 4, with a total of 156.1 mm of rainfall on the 30th of May, 2015.
- Kaieteur recorded 696.0 mm of rainfall with 28 rain days, in the month of May, 2015. This was the 7th highest total on record recorded at that station for the month of May.
- Guyana continues in its primary wet season of May/June 2015
- Normal to below normal rainfall conditions predicted for June through August.



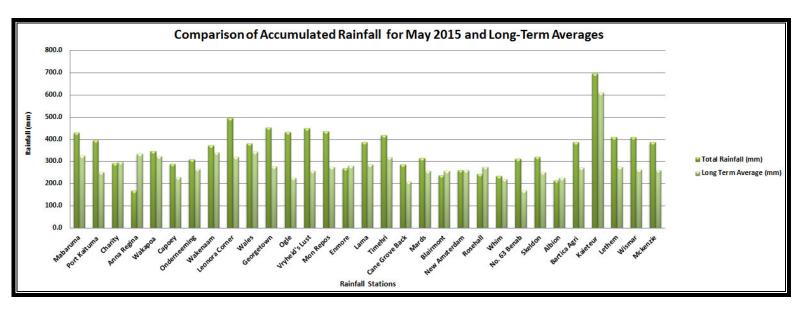






Rainfall Overview for May, 2015

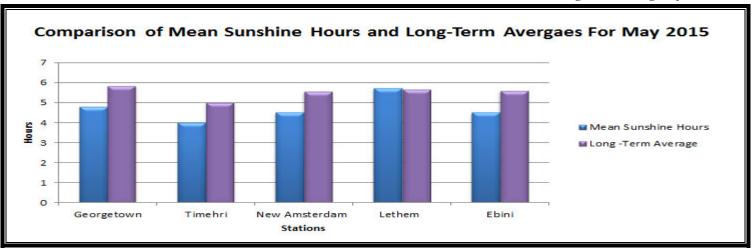
For the month of May Guyana was classified as Very Wet (VW) averaging 356mm of rainfall with 20 rain days. The highest monthly rainfall total was recorded at Kaieteur with 696.0 mm of rainfall with 28 rain days. Regional classification showed that Region 3 recorded the highest monthly average with 450.3mm of rainfall. Data analyzed thus far has revealed that most stations in Guyana recorded above normal rainfall totals for the month, excepting Charity and Anna Regina. The graph below shows the comparison of accumulated rainfall and long-term averages for selected stations.



Fig#1: Comparison of the Accumulated Rainfall Totals and Long -term Averages of selected stations for May 2015.

Sunshine Hours Summary for May, 2015

Lethem recorded the highest mean sunshine hour of 5.7 hours for the month and the highest one day total of 10.8 hours on the 21st of May. Lethem also recorded mean sunshine hours values above its long-term averages. Timehri recorded the lowest mean sunshine hours of 4 which was below its climatological average by one hour.



Fig# 2: Comparison of the Mean Sunshine hours with the Long-term Averages for selected stations for May 2015.

Region	Average Rainfall (mm)	Average Rain day	Classification	Remarks	
1	384.9	19 days	Very Wet (VW)	Mabaruma recorded 430.1 mm of rainfall with 18 rain days.	
2	295.1	19 days	Very Wet (VW)	Supernaam Forestry STN recorded 502.0 mm of rainfall with 14 rain days.	
3	450.3	20 days	Exceedingly Wet (EeW)	Fort Island recorded 544.6 mm of rainfall with 25 rain days.	
4	394.0	20 days	Exceedingly Wet (EeW)	Enterprise recorded 553.0 mm of rainfall with 24 rain days.	
5	279.9	20 days	Very Wet (VW)	Novar recorded 330.5 mm of rainfall with 22 rain days.	
6	273.3	18 days	Very Wet (VW)	Springland Forestry recorded 336.4mm of rainfall with 18 rain days.	
7	333.1	20 days	Very Wet (VW)	Bartica Agri recorded 386.0mm of rainfall with 13 rain days.	
8	Kaieteur recorded 696.0 mm of rainfall with 28 rain days. Extremely Wet(EtW)				
9	413.9	20 days	Exceedingly Wet (EeW)	Awaruwaunau recorded 445.6 mm of rainfall with 22 rain day.	
10	387.6	19 days	Very Wet (VW)	Wismar recorded 408.4mm of rainfall with 20 rain days.	

Temperature Overview for May 2015

In the month of May the highest mean maximum temperature was recorded at Lethem Region 9 with a value of 31.4°C, which corresponds to the lowest mean maximum value recorded since the beginning of the year at that station. Lethem also recorded the highest one day temperature for the month with a value of 34.2°C on the 2nd of May, 2015. Kamarang recorded the lowest mean maximum temperature of 29°C and lowest mean minimum temperature was recorded at Ebini Region 10, with 19.7°C, this value was also below the station's long-term average by 3.3°C. Ebini also recorded the lowest daily minimum temperature of 16.4°C on May, 4th, 2015.

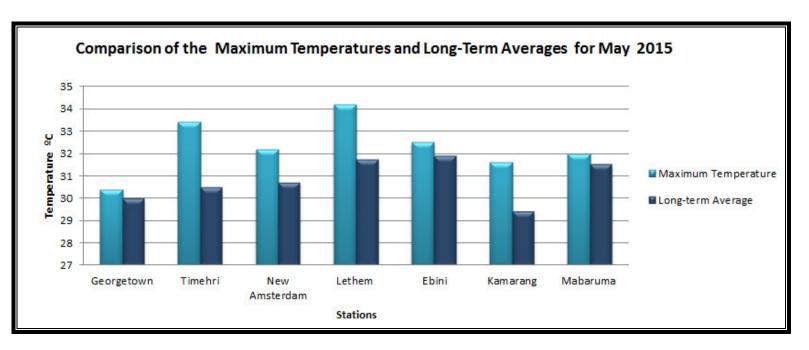


Fig # 3: Comparison of the Average Maximum temperatures and Long-term Averages for selected stations for May 2015.

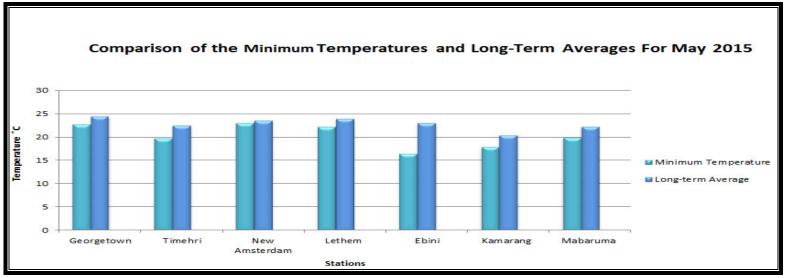


Fig # 4: Comparison of the Average Minimum temperatures and Long-term Averages for selected stations for May 2015.

Agricultural Review for May, 2015

The month of May marked the transition of Guyana from its primary dry season into the primary wet season of 2015. Thus, most parts of the country experienced generally very wet conditions, especially in the latter part of the month, which caused flooding in some agricultural areas.

Over 1,000 acres of rice lands on the Essequibo Coast was affected by floodwaters which had accumulated due to excessive rainfall, in the latter part of the month.

Farmer's Note for June, 2015

Currently Guyana is in its primary rainfall season of 2015. Due to this there is a high probability that the rainy season will see normal to below normal rainfall totals over most of the country.

In light of this, it is important that farmers listen to the advisories of their regional agriculturists or extension officers and be vigilant for themselves about the weather and follow the Hydromet's daily and three day forecast via the radio on 56.0 AM and our website at www.hydromet.gov.gy, which can be a useful tool to assist them in the planning of their agricultural activities.

Seasonal Forecast for June - August, 2015

Guyana has transitioned into its primary rainfall season of 2015. For the forecast period near normal rainfall is expected over most parts of Guyana. Showery downpours are expected to be more frequent over most parts of the country. In addition, above normal to normal temperature conditions is expected.

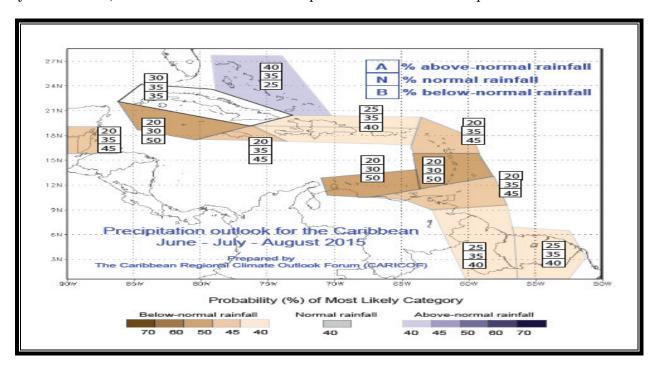


Figure 5: Indicating the Percentages of above Normal (A), Normal (N) and Below Normal (B) rainfall conditions for Guyana and the Caribbean.

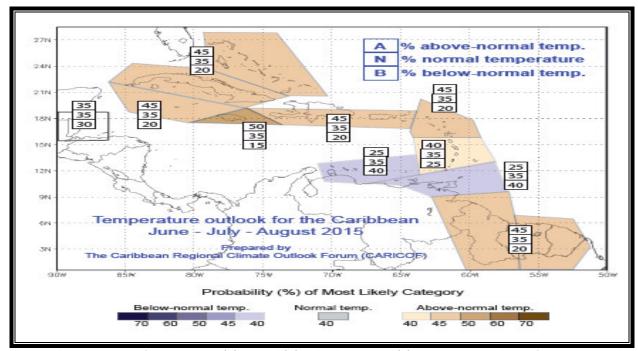


Figure 6: Indicating the Percentages of above Normal (A), Normal (N) and Below Normal (B) temperature conditions for Guyana and the Caribbean.

Table#2 Rainfall Normals and Averages of selected rainfall stations

Region	Station Name	June	July	Aug	Region	Station Name	Jun	July	Aug
1	MABARUMA *	342.7	232.4	210.4	5	BLAIRMONT	280.9	241.6	162.2
	WAUNA	315.9	288.6	237.6		MARDS	246.2	251.6	159.2
	PORT KAITUMA	305.3	261.1	189.7	6	ALBION	249.2	212.1	162.1
2	ANNA REGINA*	310.5	249.0	123.6		SKELDON	265	256.0	139.9
	CHARITY	305.8	251.7	158.0		CRABWOOD CREEK*	157.7	146.4	97.3
	Mc NABB	306.6	255.1	157.6		ROSE HALL	287.6	218.3	176.4
	WAKAPOW	334.8	320.4	199.1		NIGG 58	260.3	208.8	149.6
	ONDERNEEMING	263.2	177.7	111.4		ALBION 33	249.2	109.5	157.4
3	BOERSARIE	415.4	357.5	198.4		#73 VILLAGE	254.5	191.7	155.7
	DeKENDEREN B	385.1	315.4	183.4		# 54 VILLAGE*	184.9	156.1	125.5
	DeKENDEREN F	376.5	304.1	188.9		ANKERVILLE	253.4	218.5	147.5
	LEORNORA F	348.3	296.4	198.5		MIBIKURI	248.3	214.3	151.9
	LEORNORA B	392.9	318.5	199.2		MARA LAND DEV. SCHEME*	284.8	206.2	212.9
	WALES	338.5	315.7	185.4		NEW AMSTERDAM	276.4	231.2	157.1
	UITVLUGT B	260.8	307.2	188.6	7	APAIKWA	351.7	266.2	225.8
	La BAGATELLE LEGUAN*	240.2	190.5	120.8		MAZARUNI	309.5	310.1	170
4	BOTANIC GARDENS	310.5	266.2	179.6		BARTICA DEM. STATION*	293.1	224.2	194.4
	TIMEHRI	350.4	298.0	225.7		JAWALLA	303.9	268.6	209
	CANE GROVE B	223.9	197.1	121.9	8	KAIETEUR FALLS *	584.9	473.1	267.6
	CANE GROVE F	269.4	214.8	159.7	9	LETHEM	288.5	256.7	145.7
	L.B.I FRONT	259.8	225.4	123.8		KARASABAI	150.6	168.7	86.9
	OGLE FRONT	227.6	216.0	125.0		DADANAWA	307.4	296.5	187.1
	ENMORE FRONT	270.6	256.6	183.7	10	GREAT FALLS	369.7	339.5	225.1
	KAIRUNI*	228.5	240.9	156.2		WISMAR*	273.8	245.6	168.5

NOTE = The normals for various stations were calculated by the use of rainfall data from the year 1981- 2010 (30 years).

* = Rainfall Averages (less than 30 years of data).

Table # 3: Average rain days for the months June to August for selected stations

Station Name	June	July	August
Georgetown Botanical Gardens	22days	20days	14days
Timehri Meteorological Station	22days	23days	17days
Ogle	20days	19days	11days
Lethem	20days	20days	14days
Anna Regina	16days	14days	9days
New Amsterdam	20days	18days	12days

NOTE: Rain day = More than 1 mm of rainfall within a 24 hrs period.

TABLE#4: TIDE TABLE FOR JUNE, 2015

	JUNE HIGH TIDE ≥2.74m	
DATE	TIME	HEIGHT(m)
2014/01/01	03:47	2.96
	16:01	3.26
2014/01/02	04:33	3.06
	16:50	3.30
2014/01/03	05:18	3.11
	17:38	3.27
2014/01/04	06:03	3.09
	18:28	3.17
2014/01/05	06:47	3.01
	19:19	3.01
2014/01/06	07:33	2.87
	20:14	2.81
2014/01/14	14:56	2.78
2014/01/15	15:30	2.85
2014/01/16	04:32	2.77
202 1,02,120	16:05	2.91
2014/01/17	05:03	2.79
	16:39	2.95
2014/01/18	05:32	2.79
	17:14	2.95
2014/01/19	06:00	2.76
	17:49	2.92
2014/01/20	06:28	2.71
	18:27	2.85
2014/01/21	19:08	2.74
2014/01/27	13:11	2.79
2014/01/28	14:05	2.99
2014/01/29	02:41	2.84
	14:57	3.16
2014/01/30	03:30	3.02
	15:47	3.29
2014/01/31	04:15	3.15
	16:34	3.35

Tides Tables are provided by the Maritime Administration Department









Crop Of The Month: Corilla

June ,2015

Common Name: Corilla

Scientific Name: Momordica charantia

Plant Type: Fruit

Soil pH: 6.5 - 8

Introduction

Corilla, (*Momordica charantia*) known as bitter melon, bitter gourd, bitter squash or balsam-pear. It is a tropical and subtropical vine of the family Cucurbitaceae, widely grown in Asia, Africa, and the Caribbean for its edible fruit, which is extremely bitter. Its many varieties differ substantially in the shape and bitterness of the fruit.

Bitter melon originated on the Indian subcontinent, and was introduced into China in the 14th century.



Description

This herbaceous, tendril vine grows to 5 m. It bears simple, alternate leaves 4-12 cm across, with three to seven deeply separated lobes. Each plant bears separate yellow male and female flowers. The fruit has a distinct warty exterior and an oblong shape. It is hollow in cross-section, with a relatively thin layer of flesh surrounding a central seed cavity filled with large, flat seeds and pith. The fruit is most often eaten green, or as it is beginning to turn yellow. At this stage, the fruit's flesh is crunchy and watery in texture, similar to cucumber or green bell pepper, but bitter. The skin is tender and edible. Seeds and pith appear white in unripe fruits; they are not intensely bitter and can be removed before cooking.

Climate

The plants thrives in the tropics from lowland areas to altitudes of up to 1,000 m. Corilla requires a minimum temperature of 18°C during early growth, but optimal temperatures are in the range of 24-27°C. The plant is adapted to a wide variety of rainfall conditions, but regular irrigation is needed to ensure high yield.



Planting

Select a location with soil that drains well. A raised garden bed ensures good drainage. Bitter melon grows best in rich, sandy or loamy soils. To sow Corilla seeds directly in the soil, create holes 3/4 inch deep and spaced 20 inches apart. Drop two or three seeds in each hole, and cover the holes with a loss layer of soil. Water the planting site well.

Recommended Varieties

- 1. Sub-continent variety
- 2. Chinese variety

Health Benefits of Corilla

Corilla has been used in various Asian and African herbal medicines. In Turkey, it has been used as a folk remedy for a variety of ailments, particularly stomach complaints. In India different parts of the plant are used to relieve diabetes, as a stomachic, laxative, antibilious, emetic, anthelmintic agent, for treatment of cough, respiratory diseases, skin diseases, wounds, ulcer, gout, and rheumatism.

Harvesting/Storage

When storing one should put into consideration temperature as this is a key factor of interest. The recommended temperature is 15°C, this helps to keep down the production of ethylene since the fruit is at its climax of maturity index. Also allow moderate spacing to avoid the effects of chilling injuries to the Corilla fruit. Also it is important to have good packing containers and prevent bruising.



Fun Facts About Corilla

Some interesting facts about the vegetable Corilla:

- 1. Corilla isn't really a vegetable but a fruit as it is of the family Cucurbitaceae
- 2. The vegetable can be used for making wine and it is good for the use of as a laxative.
- 3. It is used for various stomach and intestinal disorders including gastrointestinal (GI) upset, ulcers, colitis, constipation, and intestinal worms.
- 4. It helps with digestion of food by producing digestive enzymes.

Insect Pests

- 1. Fruit fly
- 2. Epilachna beetle
- 3. White Fly
- 4. Cut worm
- 5. Spider mites

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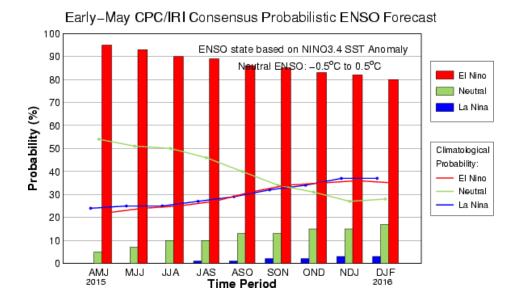
www.hydromet.gov.gy

El Niño Update

ENSO Alert System Status: El Niño Advisory

- El Niño conditions are present.*
- Positive equatorial sea surface temperature (SST) anomalies continue across most of the Pacific Ocean.
- There is an approximately 90% chance that El Niño conditions will continue through Northern Hemisphere summer 2015, and a greater than 80% chance it will last through 2015.

Table #5: CPC/IRI Early-Month Consensus ENSO Forecast Probabilities



El Niño Facts

- El Niño is associated with a drier wet season.
- If El Niño manifests, less water will be stored during the wet season.
- By consequence, less water would be available for use in the dry season.