







### Crop Weather Calendar of Maize: Cumilla Region (Districts: Cumilla, Chandpur, Bramanbaria) Bangladesh

| Region:<br>Cumilla | Maize (Rabi)   |  |  |      |          |      |      |      | Duration: 112 days  |   |      |      |               |  |                        |      |
|--------------------|--|--|--|------|----------|------|------|------|---|---|------|------|---------------|--|------------------------|------|
| Months             | November   |  |  |      | December |      |      |      | January   |   |      |      | February      |  |                        |      |
| Std. Week/Normal   | 45   | 46   | 47   | 48   | 49       | 50   | 51   | 52   | 1   | 2   | 3    | 4    | 5             | 6  | 7                      | 8    |
| Rainfall (mm)      | 18.0   | 8.5  | 4.0  | 2.5  | 0.0      | 4.5  | 1.0  | 1.5  | 0.0   | 0.0   | 0.0  | 1.5  | 3.0           | 3.0  | 6.0                    | 7.5  |
| Max. Temp. (°C)    | 30.5   | 29.8   | 29.0   | 28.2 | 27.7     | 26.5 | 25.8 | 25.4 | 24.7  | 24.5  | 25.0 | 25.4 | 26.2          | 27.3   | 28.1                   | 29.1 |
| Min. Temp. (°C)    | 21.0   | 19.3   | 18.1   | 16.9 | 15.8     | 15.0 | 14.2 | 13.4 | 13.0  | 12.7  | 12.7 | 12.6 | 14.2          | 14.5   | 16.2                   | 16.7 |
| Mean Temp. (°C)    | 25.7   | 24.6   | 23.5   | 22.5 | 21.7     | 20.8 | 20.0 | 19.4 | 18.8  | 18.6  | 18.9 | 19.0 | 20.2          | 20.9   | 22.1                   | 22.9 |
| RHmax (%)          | 95.6   | 95.3   | 95.4   | 95.8 | 95.8     | 96.2 | 96.0 | 96.0 | 96.0  | 95.5  | 95.3 | 94.4 | 94.6          | 94.4   | 93.9                   | 94.1 |
| RHMin (%)          | 58.2   | 54.8   | 52.6   | 52.2 | 50.6     | 51.9 | 52.1 | 51.3 | 51.8  | 51.2  | 49.1 | 46.4 | 47.7          | 45.2   | 46.8                   | 46.1 |
| RHmean (%)         | 76.9   | 75.0   | 74.0   | 74.0 | 73.2     | 74.1 | 74.1 | 73.6 | 73.9  | 73.4  | 72.2 | 70.4 | 71.1          | 69.8   | 70.3                   | 70.1 |
| SShr (hrs)         | 49.5   | 50.0   | 50.5   | 48.5 | 47.5     | 42.5 | 40.5 | 40.0 | 40.0  | 37.0  | 43.5 | 47.0 | 47.0          | 50.0   | 49.5                   | 50.5 |
| WD (deg)           | 183  | 184  | 190  | 195  | 206      | 192  | 211  | 213  | 205   | 209   | 218  | 212  | 203           | 214  | 206                    | 214  |
| WS(Km/hr)          | 3.7  | 3.7  | 3.5  | 3.3  | 3.3      | 4.0  | 3.5  | 3.8  | 4.0   | 4.2   | 4.6  | 4.4  | 4.6           | 4.6  | 4.6                    | 4.6  |
|                    |  |  |  |      |          |      |      |      |  |  |      |      |               |  |                        |      |
|                    | sowing   | Germination  | Vegetative Growth  |      |          |      |      |      | Silking & Tasseling   |   |      |      | Cob Formation |  | Maturity to Harvesting |      |

| Favorable Weather Conditions             |  |                         |     |                      |                      |
|--|--|-------------------------|-----|----------------------|----------------------|
| Temperature                              | At least 10 <sup>o</sup> C for germination |                         |     | 22-25 <sup>o</sup> C | 23-27 <sup>o</sup> C |
| Light Intensity                          |  | ≤200% of normal         |     |                      |                      |
| Relative Humidity                        |  | High                    |     |                      |                      |
| Soil Temperature                         |  | Above 16 <sup>o</sup> C |     |                      |                      |
| Normal phase wise water requirement (mm) | 76   | 120                     | 190 | 145                  | 100                  |

| Congenial Weather Condition for Pests & Diseases |  |  |  |  |  |
|--|--|--|--|--|--|
| Fall Army worm                                   | A threshold temperature of 10.9 <sup>o</sup> C and 559 day-degrees C is required for development. Sandy-clay or clay-sand soils are suitable for pupation and adult emergence. Emergence in sandy-clay and clay-sand soils was directly proportional to temperature and inversely proportional to humidity. Above 30 <sup>o</sup> C the wings of adults tend to be deformed. Pupae require a threshold temperature of 14.6 <sup>o</sup> C and 138 day-degrees C to complete their development. |  |  |  |  |
| Seed Rot   | A threshold temperature of 10.9 <sup>o</sup> C and 559 day-degrees C is required for development. Sandy-clay or clay-sand soils are suitable for pupation.   |  |  |  |  |

| Weather Warning       |  |  |  |  |  |
|-----------------------|--|--|--|--|--|
| Rain                  | >50 mm/day                             | >100 mm/day                            | >50 mm/day                             |  |  |
| Duration of wet spell | >25 mm for 3 days                      | >50 mm for 4 days                      | 20 mm for 4 days                       |  |  |
| Cloudy weather        |  | Cloudy weather                         | Cloudy weather                         |  |  |
| High wind             | >50 km/hr                              | >40 km/hr                              | >30 km/hr                              |  |  |
| Temperature           | Minimum Temperature <10 <sup>o</sup> C | Minimum Temperature <10 <sup>o</sup> C | Minimum Temperature <10 <sup>o</sup> C |  |  |