## Insect Weather Calendar of *Rabi* season Soybean (Yellow mosaic virus disease): Rangpur Region (Districts: Rangpur, Lalmonirhat, Nilphamari, Kurigram, Gaibandha) Bangladesh

| Reg                   | ion: Rangpur      | Rabi season Soybean: Yellow mosaic virus disease Life s |  |                                  |  |   |   |            |           |           |             |                              | snan | 120-1 | 30 d | av   |                            |      |      |      |
|-----------------------|-------------------|---|--|----------------------------------|--|---|---|------------|-----------|-----------|-------------|------------------------------|------|-------|------|------|----------------------------|------|------|------|
| 1109                  | Months            |   |  | 11401000                         | January                                  |   |   | February   |           |           |             | Life span 120-130 day  March |      |       |      |      | April                      |      |      |      |
| Weather               | Max. Temp. (°C)   |   | Viral infection and symptom appearance less severe due to aphid insect at 24 °C to 25 °C |                                  |  |   |   |            |           |           |             |                              |      |       |      |      |                            |      |      |      |
|                       | Min. Temp. (°C)   |   |  |                                  |  |   | and symptom appearance are  |            |           |           |             |                              |      |       |      |      |                            |      |      |      |
|                       | RH Max (%)        |   |  |                                  |  | Dis                                     | sease development favored by  | certain ri | sing rela | tive humi | dity        |                              |      |       |      |      |                            |      |      |      |
|                       | RH Min (%)        |   |  |                                  | Disea                                    | ase development corre                   | lated with relative humidity as   |            |           |           | disease inc | ident decrea                 | sed  |       |      |      |                            |      |      |      |
|                       | Rainfall (mm)     |   | 1  |                                  |  | Disease development favored by rainfall |   |            |           |           |             |                              |      |       |      |      |                            |      |      |      |
| Weekly normal weather | Std. Week/ Normal | 1   | 2  | 3                                |  | 4                                       |   | 5          | 6         | 7         | 8           | 9                            | 10   | 11    | 12   | 13   | 14                         | 15   | 16   | 17   |
|                       | Rainfall (mm)     | 1.0   | 2.5  | 2.0                              |  | 1.0                                     |   | 1.0        | 1.5       | 3.5       | 1.5         | 2.5                          | 1.0  | 2.5   | 5.5  | 18.5 | 11.0                       |      | 28.5 | 31.5 |
|                       | Max. Temp. (°C)   | 22.7  | 22.4   | 23.2                             | 23.4                                     |   |   | 24.7       | 25.9      | 26.7      | 27.5        | 28.5                         | 29.9 | 30.8  | 31.6 | 31.4 | 32.1                       | 32.5 | 32.3 | 32.0 |
|                       | Min. Temp. (°C)   | 10.9  | 10.4   | 10.8                             |  | 10.8                                    |   | 11.8       | 12.7      | 13.7      | 14.4        | 15.3                         | 16.1 | 17.3  | 18.4 | 19.5 | 20.3                       | 21.1 | 21.9 | 21.9 |
|                       | RH max (%)        | 96.0  | 96.0   | 95.8                             |  | 95.7                                    |   | 95.5       | 94.3      | 93.7      | 92.9        | 91.4                         | 89.8 | 88.7  | 88.1 | 87.7 | 88.5                       | 88.4 | 89.9 | 90.9 |
|                       | RH Min (%)        | 58.5  | 57.8   | 56.2                             |  | 54.2                                    |   | 51.6       | 48.0      | 47.1      | 45.3        | 42.8                         | 39.6 | 40.8  | 42.5 | 48.8 | 49.7                       | 50.7 | 56.7 | 59.0 |
|                       | SS hr (hrs)       | 36.0  | 36.5   | 39.5                             |  | 41.0                                    |   | 44.0       | 48.5      | 50.0      | 51.5        | 56.5                         | 57.5 | 57.0  | 54.0 | 49.0 | 51.5                       | 51.0 | 47.5 | 47.0 |
| Growth stage          |                   |   |  |                                  |  |   |   |            |           |           |             |                              |      |       |      |      |                            |      |      |      |
|                       |                   | Germina   | ation a  | nd seedling                      | vegetative growth                        |   |   |            |           |           |             | Reproductive                 |      |       |      |      | Maturity and<br>Harvesting |      |      |      |
| Disease Cycle         |                   | Virus Host cell   |  |                                  | September 1                              |   |   |            |           |           |             |                              |      |       |      |      |                            |      |      |      |
|                       |                   |   |  | Virus attachment<br>on host cell | Penetration,<br>Replication<br>& Release | Transmission                            | Virus attachment on host cell to Disease development process continued up to maturity stage |            |           |           |             |                              |      |       |      |      | turity                     |      |      |      |