

## **A report on the cold wave conditions prevailed over northern region of India during 1<sup>st</sup> to 7<sup>th</sup> January 2013**

### **Haryana**

Severe cold wave conditions prevailed in Haryana since 25<sup>th</sup> December, 2012. Maximum temperature ranged from 5 to 10°C below normal and minimum temperature observed during the week remained 2 to 5°C below normal.

Foggy conditions in the morning and ground frost conditions prevailed since last 2-3 days. Temperatures hovered around 10 degrees below normal.

On 6<sup>th</sup> January, minimum temperatures were below 0°C at places like Hisar (-1.5°C), Karnal (-0.2°C), Panipat (-0.2°C), Rewari (-1.0°C) and Bhiwani (-1.5°C).

Prevailing weather conditions are detrimental to fruits and vegetable crops particularly tomato and potato. There may be likely attack of blight in potato besides cold injuries due to foggy and low temperature conditions. Aphid attack in mustard crop can be anticipated under high humidity/fog and low temperature conditions. Farmers are advised to adopt recommended preventive measures/prescribed spray schedule when sky gets clear. Late sown wheat crop may be given light irrigation 20 days after sowing and subsequent irrigation should be after 40-44 days after sowing depending upon weather conditions.

Farmers are advised to apply light irrigation to crops to avoid frost in the fields. They may lit fire/smoke in surrounding areas to prevent adverse impact on crops in prevailing extreme cold weather conditions. Fruits trees/nurseries should be protected by covering with polythene sheet and vegetable crops should also be protected against chilling wind using shelter-belt made up of cotton sticks or bajra kadwi (dry).

Animals should be protected from the biting cold, by keeping them indoor in dry and clean enclosures.

### **Punjab**

Adverse impacts of this cold wave have not been reported from anywhere in Punjab. Maximum temperatures are below normal by 8-9°C whereas the minimum temperatures are about 1-1.5°C below normal. The temperature conditions are favourable for wheat crop which at present is in the tillering stage as low temperature is favourable for tiller formation.

*Brassica juncea* is in the flowering stage whereas *Brassica napus* is in vegetative stage. The present temperature conditions are favourable for brassica crops.

## **Rajasthan**

Severe cold waves prevailed since the first week of January over the entire state. However, the cold wave condition in the north, east and west is more intense over most of places in eastern part (Churu, Sikar, Jhunjunu, Jaipur) of the state, minimum temperature was at freezing point during last three days. The minimum temperature on 6<sup>th</sup> Jan recorded at Churu was -2.2°C, Jaipur 3.4°C, Sikar -3.8°C, Mount Abu 0°C, Udaipur 4.0°C, Ganganagar 0.8°C, Bikaner 2.4°C, Chittorgarh 4.2°C. The night temperature was below normal by 3 to 5°C in eastern part and 2 to 3°C in southern parts. Damage to the vegetable crops, especially tomato, chillies, brinjal due to ground frost was reported. Mustard, gram and pea are also affected by cold wave in the eastern parts. The night temperature at other places remained between 5.8 and 7.0°C. The day temperature is around 20°C during this week.

Dense fog was also reported in the eastern and northern parts during the week that affected the normal life and vehicular movement in the early hours. The extent of area damaged by frost is still to be assessed.

## **East Uttar Pradesh**

Maximum temperature during the week in almost all the parts of the Eastern Uttar Pradesh was below normal by 6 to 11°C and minimum temperature was also below normal by 3 to 6°C. Foggy weather with an average 1 to 1.5 hrs of bright sunshine hours and humidity was in the range of 90 to 100%.

Flowering initiation was affected in pulse crops like pigeon pea, chick pea and pea. Leaf roller and pod borer in pigeon pea, powdery mildew in pea were noticed. Late blight in potato and aphids in mustard were noticed.