

Hop report - Saaz fine aroma hops

Crop 2007 – July 2007 (Saaz region)

Weather condition – July 2007

| Temperature & precipitation in July | 2007 | 2006 | 30 years average |
|---------------------------------------|--------------|--------------|------------------|
| Average temperature (°C) | 19,5 | 22,8 | 18,0 |
| Total precipitation in July (mm) | 87,4 | 59,5 | 59,0 |
| Max. temperature (°C) | 36,7 (16.7.) | 36,5 (20.7.) | |
| Min. temperature (°C) | 10,1 (31.7.) | 8,2 (17.7.) | |
| Highest precipitation in one day (mm) | 45,7 (22.7.) | 14,2 (31.7.) | |
| Total precipitation Jan - July (mm) | 287,5 | 270,9 | 263,0 |
| Number of dry days | 13 | 22 | |

However the average month climatic data concerning July 2007 do not exceed the normal limits, this month was characteristic by extreme fluctuation of temperatures. Whereas the temperatures of the first and the third decades varied around normal or slightly below normal values, the temperatures recorded during the second decade have the average expressively overdrawn. The precipitations on the whole were rather weak, with an exception of the rain of 22nd July, when the rainfalls reached 45,7 mm, what represent more than 50% of the total precipitations of the months. Higher intensity of windy weather is worth mentioning.

Growth report

Extreme unbalance of the growth of individual hop gardens seems to be the most distinctive feature of this crop. The age of the gardens and the date of the cut of the plants have influenced the growth and the habitus of the gardens more than usually – the older is the garden, the weaker is the growth of plants. When analysing the influence of the date of the plant cut, it is becoming evident, that the earlier cut plants are weaker. The hops started to blossom in full within the first decade of July. Thanks to rich precipitations in the second decade and the beginning of the third decade, the hop plants began to blossom for the second time in majority of the gardens. The present state of the vegetation from the point of view of the maturing of hops can be described as follows: In majority of the gardens relatively developed cones out of the first flower setting are visible on individual plants, while higher parts of the plants bear new flowers. It will be necessary to observe further vegetation development (especially the continuing of the second blossoming) with regard to the determination of the time of hop-picking. The development of climatic conditions by the end of the growing season can naturally influence the final results of hop production in 2007. Nowadays we consider negative relatively low night temperatures, which decrease down to 6°C in some localities. Based on evaluation of the growth we estimate, that there will be the average or slightly below average production in terms of quantity. View to state of vegetation we already dispose of results of the first tests of alpha bitter substances up to 1st of August, being analysed, at the moment, by the laboratory of Chmelařský institut (Hop Research Institution) in Žatec. The arithmetic average of the 15 sample withdrawals in Saaz region shows the content of 2,28% of KH, in case of 5 withdrawals in Auscha region than 1,85% of KH. For comparison we indicate the levels of KH as measured in 2005 and 2006.

| YEAR | 2007 | 2006 | 2005 |
|--------------------------|----------|----------|----------|
| DAY OF SAMPLE WITHDRAWAL | 01.08.07 | 07.08.07 | 04.08.07 |
| THE ARITHMETIC AVERAGE | | | |
| SAAZ/SAAZ | 2,28% | 1,37% | 2,38% |
| SAAZ/AUSCHA | 1,86% | 1,35% | 2,10% |

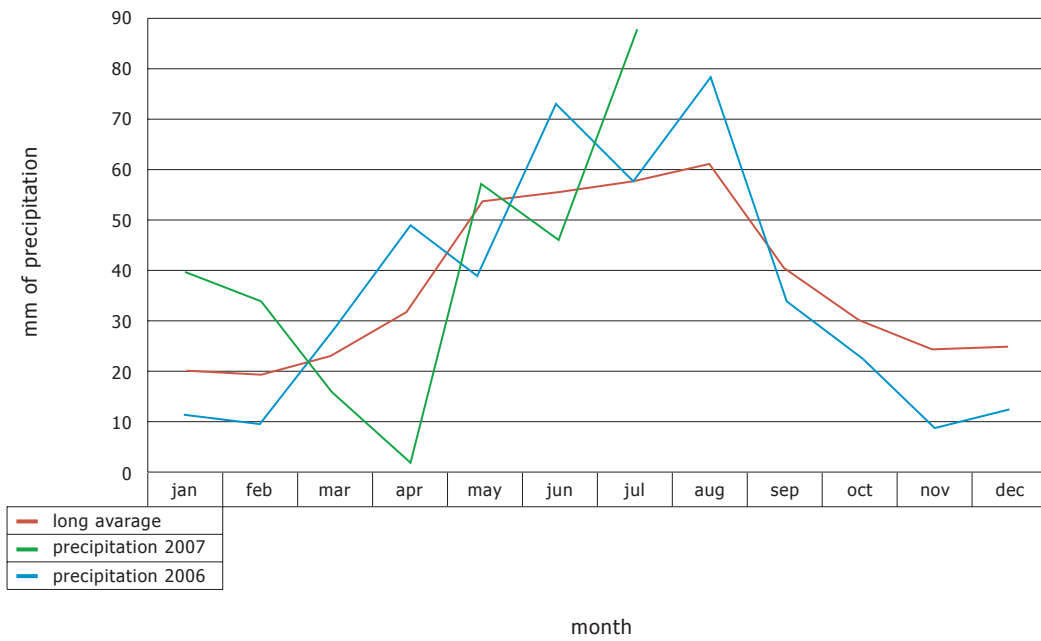
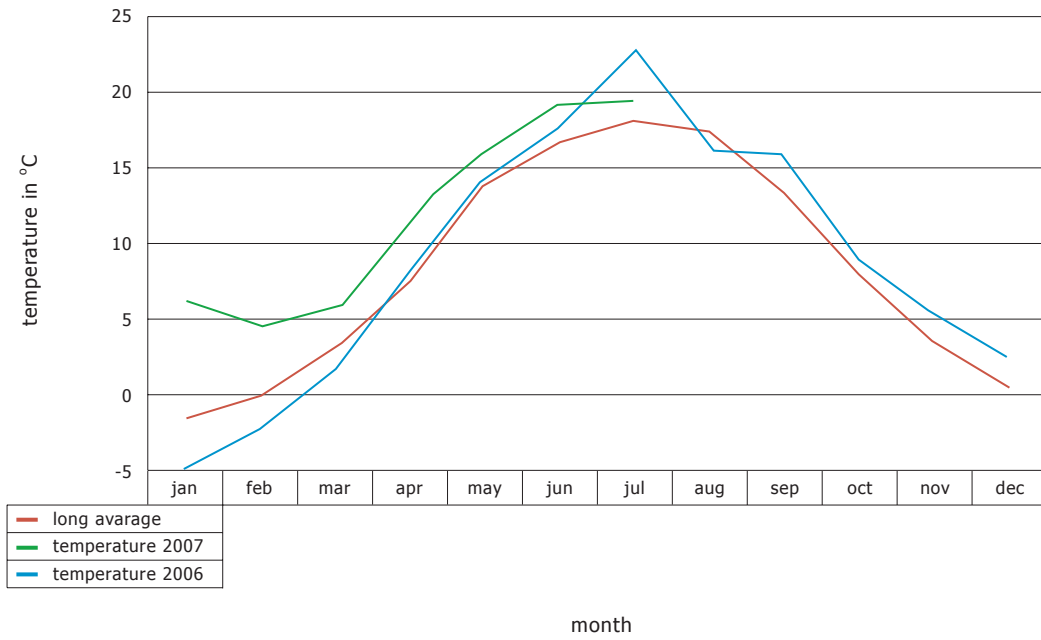
Hop phytosanitary information

From the point of view of keeping health state of the hops, the situation in July was rather complicated. Compared to the previous years, when the elimination of influence of living pest insects was easier than the protection against downy mildew of hops (*Pseudoperonospora humuli* Miy et Takah.), the situation in this year changed substantially. Due to different development of the hops vegetation on individual localities, the effect of preparative Confidor 70WG was very different and on some hop gardens it was necessary to undergo further treatment of plants against that pest. The conditions for development of Red spider mite (*Tetranychus urticae* Koch) were favourable, especially within the second decade of the month, what reflected in higher occurrence of that pest. Therefore it was recommended to use urgently the preparatives Ortus 5SC and Omite 30W in the concentrations indicated by the Methodology of Hop Protection. The treatment was complicated by high temperatures, which are not convenient for application of Omite 30W, and also by long-lasting windy weather.

The protection against downy mildew of hops is carried out on the basis of the monitoring of occurrence potentiality, in accordance with the Methodology of Hop Protection. In higher extent it was necessary to treat the hop gardens against powdery mildew, as prevention.

Other information

View to the vegetation stage of hops we estimate that the hop harvest will begin between 17th and 19th August 2007, in majority of cases. Some of the farmers nevertheless will start harvesting on 15th August 2007.





Hop garden in front of ruins of Hazenburk castle at the end of July



Hop cones at the end of July

Saaz, 2nd August, 2007

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