

CLIMATIC REQUIREMENTS OF PLANTS

Made by:

Shilter Zh.

Sagatbek S.

Gr. 103, Agronomy

30.09.2015

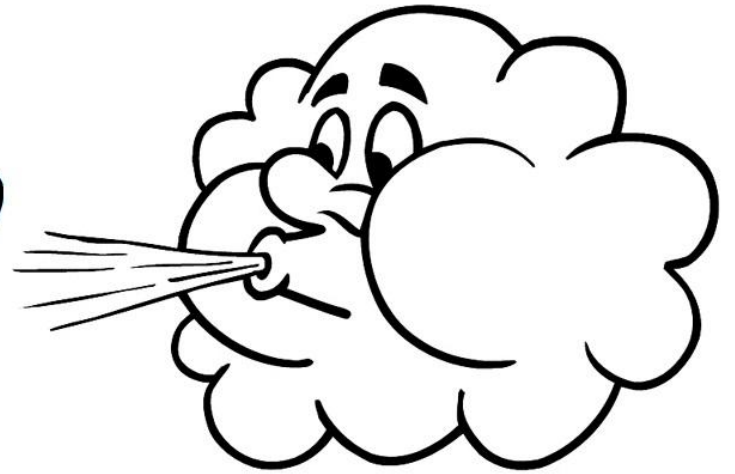
Outline:

- *Introduction*
- *The effect of temperature on the yield of grain;*
- *To prevent the plant from a low yield*
- *Crop temperature needs*
- *Conclusion*



rainy

WIND



*most important
climatic factor to be
considered in
agriculture.*



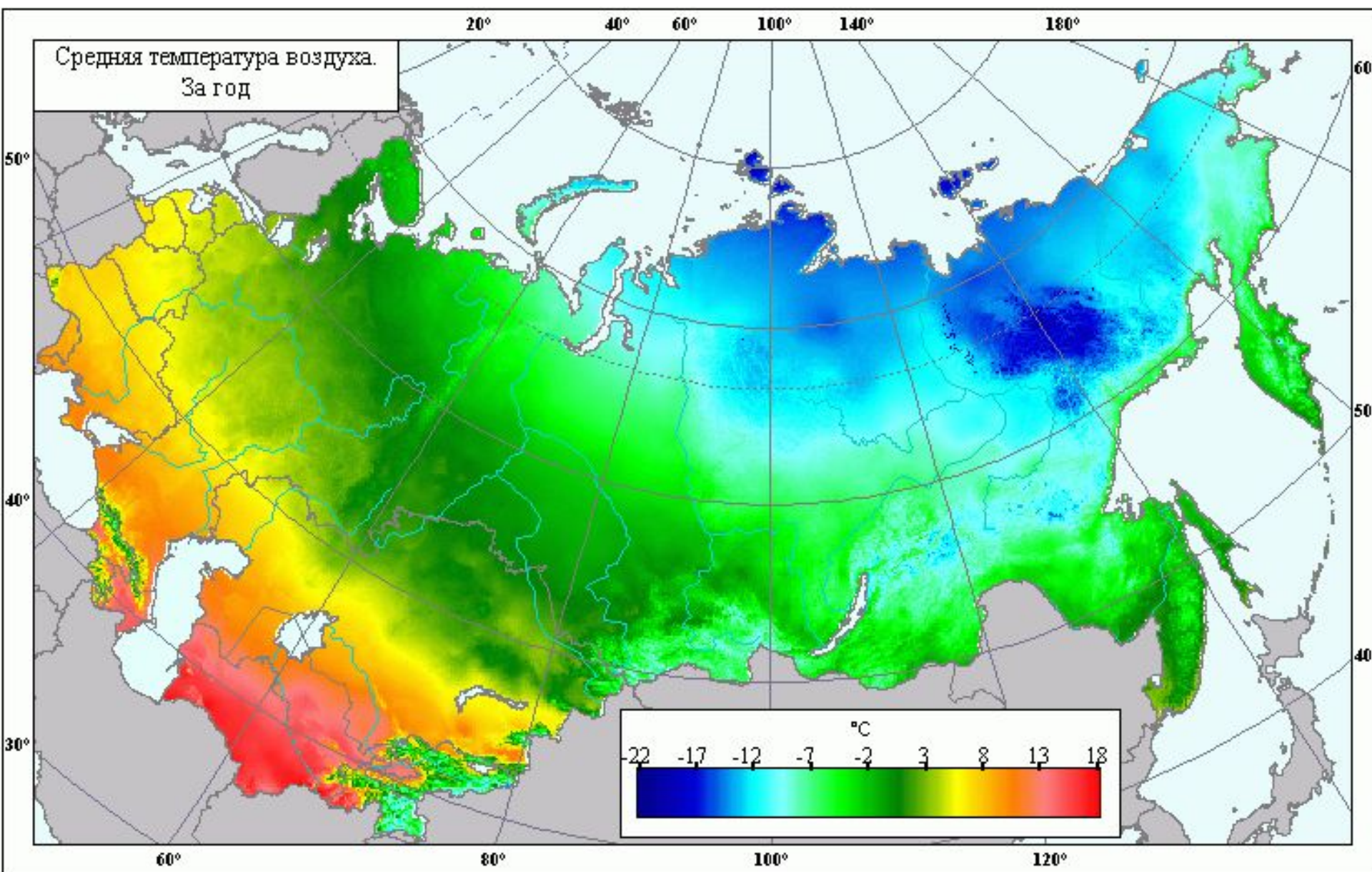
CROP TEMPERATURE NEEDS

(the sum of active temperatures above 10°C)











- *Wheat* — 1200—1700,
- *Barley* — 960—1450;
- *Oats* — 1000—1600;
- *Millet* — 1410—1950;
- *Buckwheat* — 1200—1400;
- *Potato* — 1200—1800.
- *Corn* — 1100—2900;
- *Sunflower* — 2000—2300;
- *Cotton* — 3000-3400

Средняя температура воздуха.
За год



The effect of temperature on the yield of grain

developmental phase	crop loss
<p>tillering</p> <p>18,3°C 26,1°C</p>  <p>Колосок в фазу кушения</p>	<p>-10-15 %</p> 
<p>booting</p> 	<p>-10-15 %</p> 

developmental phase	crop loss
<p>earing</p> 	<p>-20-40 %</p> 
<p>grain maturity</p> 	<p>-5-7 %</p> 

To prevent the
plant

from a low yield

• Create resistant crop
varieties

of high temperature;

• To use of
resource-saving
technologies



Questions:

- **How does high air temperature influence on the yield in tillering period of wheat?**
- **How can we prevent a low yield of crops from high temperature?**



References

- Kartamishev VG Oil crops in arid regions of Russia // environmental management and agricultural production in the southern regions Russian Federation.-M.: "Modern notebook", 2003.
- Elderen, E. van. Moisture content of wheat in harvesting period / E. van Elderen, Hoven S.P.J.H. van // Journal agricultural engineering research. - 1973. Vol. 18. №2.