CLIMATIC REQUIREMENTS OF PLANTS

Made by:
AskarovaZh.
Sagatbek S.
Gr. 103, Agronomy
30.09.2016

Outline:

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

rainy

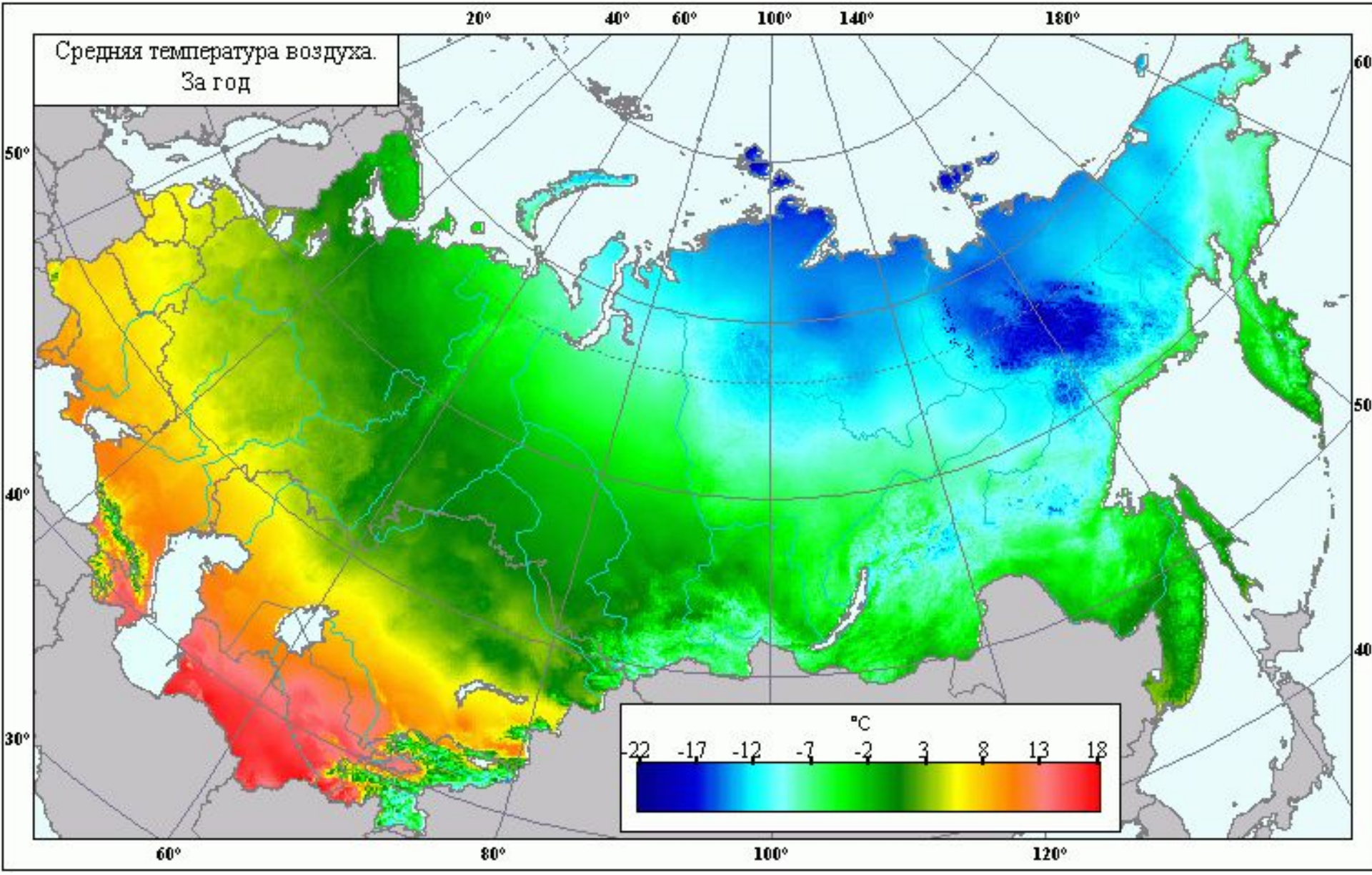
WIND

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
20°
40°
60°
100°
140°
180°
60°
50°
40°
30°
°C
-22
-17
-12
-7
-2
3
8
13
18
60°
80°
100°
120°

The effect of temperature on the yield of grain

developmental phase	crop loss
tillering 18,3°C 26,1°C  Колосок в фазу кущения	-10-15 %
booting 	-10-15 %

developmental phase	crop loss
earing 	-20-40 %
grain maturity 	-5-7 %

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.