The influence of seasons on the appearance of trees by Lucina

RESEARCH OBJECT

The appearance of trees in different seasons.

THE AIM

I want to find out why trees change the color of their leaves in different seasons.

RESEARCH METHODS

Information search, observation, interview.

INVESTIGATION

•Wanting to know why trees change their color and appearance at different times of the year, I decided that biological science specialists could best explain this.

• Since I don't know such people myself, I decided to look for information on the Internet and found interviews published in different media with two biologists - ecologist Rimante Vitkauskaita and naturalist Almantas Kulbi.

• I examined the interviews I found, and also looked for additional information on the Internet and analyzed all the material I found.

• Although I did not conduct the interviews myself, the interviews with naturalists published in the media helped to find answers to the questions raised in my research.

RESEARCH CONCLUSIONS

•The color of the leaves changes in different seasons. Leaves can be green, red, yellow, because they contain pigments (i.e., substances that determine color).

• In the spring, we are waiting for the green color, which is determined by green pigments - chlorophylls.

• When the amount of light decreases in autumn, the green pigments break down. They are replaced by red, yellow, orange pigments.

• The cooling air in autumn affects the chlorophyll in the leaves and it breaks down into carotenoids and anthocyanins, which are responsible for the formation of new colors.

•Carotenoids in the leaves determine the yellow color, and anthocyanins - the pink color.

•The color of the leaves is also influenced by the type of tree. We will never see birches decorated with pink colors, because they only have substances that determine the yellow color. And oaks do not have color-determining elements at all, so when chlorophyll breaks down, their leaves simply turn brown.