TO THE QUESTION OF THE IMPACT OF CLIMATE CHANGE ON THE ECOLOGICAL STATE OF ARTIFICIAL PLANTATIONS OF PITSUNDSKAYA PINE IN THE SEASIDE AREA OF GELENDZHIK

Elizaveta Derevenets¹

¹Municipal budgetary educational institution of average comprehensive school #2 named after Admiral Ushakov (MBOU SOSh #2), Russia
svderevenets@yandex.ru

Gelendzhik is the resort town, there aren’t a lot of industrial enterprises here. The main pollutant is transport. The work purpose is the assessment of a condition of the artificial landings of a pine located along the Federal highway "Don" and landings, which is nearly the sea coast. Researches were conducted to a standard technique of the General vital state (A. S. Bogolyubov). The assessment of a condition of pines was carried out during 6 years: from 2010 to 2015. For carrying out research we used 6 experimental grounds on the Markotkhsky spine and 2 control grounds within the town. We investigated 24 trees on each platform, middle age of the trees were 30 - 40 years. Results. 1. The condition of trees in the pine forests located in immediate proximity with the Federal highway "Don" (No. 1, 2, 3) is unsatisfactory. As even weak influences of the majority of atmospheric gaseous pollutants (sulphurous gas, nitrogen oxides, etc.) give effect of a necrosis and hloroz of pine needles, the condition of pines is connected with technogenic pollution. So near the Federal highway "Don" the air environment is strongly polluted by exhaust gases. Information of 2012 confirm that negative influence of the route on Markotkh's vegetation decreases at reduction of load of the route. 2. On the sites located above on a slope (No. 4,5,6) thanks to remoteness and the wind mode intensity of influence of pollutants is lower and a condition of pines the quite satisfactory. 3. Trees on the sites located near the sea (No. 7,8) are in a good shape. Small deterioration of a state is noted in very droughty years. Conclusion. Results of six years' research show that the condition of the plantings which are in close proximity with the road worsens. It is explained by increase in intensity of the movement on the road, especially during a resort season. Gelendzhik is the city with a good ecological shape, but the damage to environment is already caused. If
not to take measures, we can lose a unique part of the nature in the future, recreate it will be impossible. Measures of reduction of negative impact of exhaust gases were offered. Results of researches are transferred to ecological department of the City administration of Gelendzhik.