

The Baltic Sea Project

ESTIMATION OF AIR QUALITY USING BIOINDICATORS

Test: condition of fir trees, lichens, tar spot fungus – protocol to be sent to co-ordinator

Date: 20.09.2012.

School: Jõhvi Gümnaasium Teacher: Tiina Gashkov Class/Group: 10th class

Address . Hariduse 5, Jõhvi, Estonia

Natural conditions and topographical situation (coastal, inland, mountain, plain): inland

Possible local source of pollution: high way (~1km)

I Fir trees

1, 2, 3. Investigating forest damage in fir trees

Name of the tree (fir, spruce or pine)

Tree no.	1	2	3	4	5	6	7	8	9	10	Mean value
1. Needle loss class (1, 2, 3)											
2. No. generations of needles											
3. Occurrence of fear shoots (1, 2, 3)											

II Lichen

1. Counting the number of kinds of different types of lichen

Name of the tree (English or Latin name): Acer platanoides

Tree no.	No. kinds of crustose lichen	No. kinds of foliose lichen	No. kinds of fructicose lichen	Zone
1	3	5	1	2
2	3	3	1	2
3	3	2	1	2
4	2	4	2	2
5	2	3	1	2
			Mean value	

1

zone:

2. Determining the degree of coverage of the lichen

Name of the tree (English or Latin name): Acer platanoides

Tree no.	Coverage of crustose lichen in %	Coverage of foliose lichen in %	Coverage of fructicose lichen in %	Total coverage of the whole overhead film in %
1	30	5	40	75
2	20	19	1	40
3	40	18	2	60
4	50	25	5	80
5	35	10	20	65
	,		Mean value :	64

Zone :

64
2

III Tar Spot Fungus

Name of the maple tree (English or Latin name)
Zone

IV. Discussion of the result and the state of the air on a separate paper.