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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 – 26 May 2010
School – Tallinn English College
Teacher – Kaisa-Helena Luht
Class/Group - G1
Address – Estonia pst 10, Estonia
Natural conditions and topographical situation (coastal, inland, mountain, plain) – coastal, plain
Possible local source of pollution – cars, transport, carbon dioxide from cars

I Fir trees

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

Name of the tree (fir, spruce or pine): Pine

Tree no.	1	2	3	4	5	6	7	8	9	10	Mean value
1. Needle loss class (1, 2, 3)	II	III	II	II	III	I	III	III	II	I	2,2
2. No. generations of needles	1,5	2,5	1,5	2	3,5	1	3	1	1,5	4	2,15
3. Occurrence of fear shoots (1, 2, 3)	1	1	1	1	1	1	1	1	1	1	1

II Lichen

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

Name of the tree (English or Latin name): Linden

Tree no.	No. kinds of crustose lichen	No. kinds of foliose lichen	No. kinds of fructicose lichen	Zone
1	15	30	-	3
2	16	28	-	3
3	17	36	-	3
4	14	36	-	3
5	18	32	-	3
Mean value zone:				3

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2. Determining the degree of coverage of the lichen

Name of the tree (English or Latin name): Linden

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	2	12	-	2
2	3	5	-	1
3	2	16	-	3
4	1	20	-	3
5	1	18	-	3
			Mean value :	2.4
			Zone :	2

III Tar Spot Fungus

Name of the maple tree (English or Latin name): Maple

Zone ....3..................

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