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: 26.05.2010
School: Tallinn English College
Teacher: Kaisa-Helena Luht
Class: 10
Group: Roland Martin Teras, Johanna Taiger, Maris Matskin
Address: Estonia pst. 10, Estonia
Natural conditions and topographical situation (coastal, inland, mountain, plain): coastal / inland
Possible local source of pollution: Traffic / industries

I Fir trees

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

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

Tree no.	1	2	3	4	5	6	7	8	9	10	Mean value
1. Needle loss class (1, 2, 3)	1	1	1	2	1	1	2	2	2	1	**1.4**
2. No. generations of needles	4	3.5	3	2	2.5	2.5	1.5	1.5	3	4	**2.75**
3. Occurrence of fear shoots (1, 2, 3)	1	1	1	2	1	1	1	1	2	1	**1.2**

II Lichen

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

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

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

2. Determining the degree of coverage of the lichen

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

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	81	86	-	84
2	49	100	-	75
3	55	98	-	77
4	50	79	-	65
5	67	80	-	74
			Mean value :	**75%**
			Zone :	**4**