BULGARIAN DATA
ACCOMPANYING REPORT

/Sampling and Analysis of Depositions/

The realization of the intensive monitoring program in Bulgaria was organized in 3 stationary areas. The stations are equipped with installations collecting atmospheric depositions.
The number of collectors for throughfall sampling in the stations is:
Vitinia and Staro Oriahovo – 9 units, in Yundola – 10 units.

For each station, there are 3 collectors for open field depositions sampling. Equipment for wet only depositions was installed in the stations. An installation for collecting of stemflow was installed in the beech stand of Vitinia station, where five sample trees were selected for stemflow sampling equipping.

The frequency of collection and analytical methods are adopted according to the Manual. The samples of depositions were analyzed for all mandatory parameters, according the Manual. The type of samples, sampling frequency, number and analyzed parameters are presented in the table:

Type of samples	Sampling frequency	Parameters
Wet only	2 per month	pH, Conductivity, S-SO_4, N-NO_3, N-NO_2, Cl, N-NH_4, Na, K, Mg, Ca, Alkalinity, total N, N (Kelldal), Cu, Zn, Pb, Cd, Fe, K, Na
Open field bulk	2 per month	
Throughfall (2 individual samples and 1 mixed per period)	2 per month	
Throughfall in additional sample plots (1 mixed sample per period)	2 per month	
Steamflow	2 per month	

The analytical methods, units and limits of detection for the elements are given as follows:

Sequence number	Parameter	Units	Standardized internal methods for analysis	Detection limit
1	pH		БДС 17.1.4.27-80	4.0
2	Conductivity	mS/cm	БДС EN 27888	0.5
3	Alcalinity	µeq/l	БДС EN ISO 9963-1	0.3
4	Cl^-	mg/l	БДС EN ISO 10304-1,2	0.003
5	$S\text{-}SO_4$	mg/l	ВВМ № 205	0.46
6	Ca	mg/l	БДС EN ISO 14911-2002	0.6
7	Mg	mg/l	БДС EN ISO 14911-2002	0.4
8	$N\text{-}NH_4$	mg/l	ISO 7150-1	0.005
9	$N\text{-}NO_2$	mg/l	EN 26777	0.0011
10	$N\text{-}NO_3$	mg/l	БДС EN ISO 10304-1,2	0.0003
11	N (Kelldal)	mg/l	БДС EN 25663	0.41
12	N(total)	mg/l	SUM(9,10,11)	–
13	Cu	mg/l	ISO 8288	0.001
14	Zn	mg/l	ISO 8288	0.001
15	Pb	mg/l	ISO 8288	0.001
16	Cd	mg/l	ISO 8288	0.001
17	PO4	mg/l	БДС EN ISO 10304-1.2	0.01
18	Fe	mg/l	БДС ISO 6332	0.011
19	K	mg/l	БДС EN ISO 14911-2002	0.3
20	Na	mg/l	БДС EN ISO 14911-2002	0.15