

AMBIO

Electronic Supplementary Material

This supplementary material has not been peer reviewed.

Title: **On the scope and management of pesticide pollution of Swedish groundwater resources: The Scanian example.**

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Table S1

^3H - ^3He analysis results. Tritogenic ^3He is calculated based on an estimated recharge temperature (8°C) and altitude (40 m a.s.l.).

Well	^3H (TU)	Tritogenic ^3He (TU)	^3H - ^3He age (years)
1	8.27	^a	n.a. (but ^3H alone indicates predominantly modern water)
2	7.19	2.8	6
3	7.00	2.0	5
4	6.26	22.4	27
5	6.92	9.5	15
6	6.78	7.6	13
7	0.10	^a	n.a. (but ^3H alone indicates old water)
8	0.02	^a	n.a. (but ^3H alone indicates old water)
9	6.86	5.7	11
10	5.96	6.2	13
11	7.60	0.5	1
12	5.23	15	24
13	7.62	0.8	2
14	5.32	14.6	23
15	6.28	6.6	13
16	6.67	4.1	9
17	11.94	130.1	44
18	0.53	3.7	37 (but ^3H alone indicates predominantly old water)
19	0.30	^a	n.a. (but ^3H alone indicates predominantly old water)
20	7.52	15.5	21
21	7.94	3.0	6
22	7.63	^a	n.a. (but ^3H alone indicates predominantly modern water)
23	6.98	2.9	6

^a Non-quantifiable

Table S2

Substances included in the adjusted data set, with information of *type* (H = herbicide, I = insecticide) and *use* (N = prohibited and not in use, Y = permitted and in use at time of sampling).

Substance	Type	In use
2,4-D	H	N
Atrazine	H	N
Atrazine-desethyl	"	"
Atrazine-desisopropyl	"	"
BAM	H	N
Bentazone	H	Y
Cyanazine	H	N
Dichlorprop	H	N
Dimethoate	I	N
Ethofumesate	H	Y
Fenoxaprop	H	Y
Isoproturon	H	Y
MCPA	H	Y
Mecoprop	H	Y
Metamitron	H	Y
Metazachlor	H	Y
Metribuzin	H	Y
Quinmerac	H	Y
Simazine	H	N
Terbuthylazine	H	N

Table S3

Results of the pesticide analyses conducted as part of this study.

Well	Detection (concentration; $\mu\text{g L}^{-1}$)
1	atrazine (0.001 ^a), metalaxyl (0.002 ^a)
2	atrazine (0.003), BAM (0.009 ^a), bentazone (0.069)
3	atrazine (0.018), atrazine-desethyl (0.023), BAM (0.017), terbuthylazine (0.002), terbuthylazine-desethyl (0.005)
4	atrazine (0.004), BAM (0.007 ^a)
5	atrazine (0.002), atrazine-desethyl (0.009 ^a), BAM (0.024)
6	atrazine (0.006), atrazine-desethyl (0.006 ^a), BAM (0.006 ^a)
7	-
8	-
9	bentazone (0.008 ^a)
10	-
11	BAM (0.007 ^a)
12	atrazine (0.003), atrazine-desethyl (0.004 ^a), bentazone (0.15), terbuthylazine (0.006), terbuthylazine-desethyl (0.001 ^a)
13	bentazone (0.026)
14	-
15	bentazone (0.004 ^a), quinmerac (0.001 ^a)
16	atrazine (0.001 ^a), atrazine-desethyl (0.002 ^a), metalaxyl (0.001 ^a), terbuthylazine-desethyl (0.005)
17	atrazine (0.005), atrazine-desethyl (0.1), BAM (0.051), terbuthylazine-desethyl (0.001 ^a)
18	atrazine (0.004), atrazine-desethyl (0.009 ^a), BAM (0.008 ^a), bentazone (0.04)
19	BAM (0.003 ^a), mecoprop (0.006 ^a)
20	atrazine-desethyl (0.008 ^a), BAM (0.065), terbuthylazine-desethyl (0.003)
21	-
22	atrazine (0.005), atrazine-desethyl (0.006 ^a), BAM (0.019)
23	BAM (0.006 ^a), imidacloprid (0.067), simazine (0.001 ^a)

^a Trace level detection