

Correction: Schelfhout, S.; et al. Tree Species Identity Shapes Earthworm Communities. Forests 2017, 8, 85

Schelfhout, Stephanie; Mertens, Jan; Verheyen, Kris; Vesterdal, Lars; Baeten, Lander; Muys, Bart; De Schrijver, An

Published in: Forests

DOI:

10.3390/f8100366

Publication date: 2017

Document version
Publisher's PDF, also known as Version of record

Document license:

CC BY

Citation for published version (APA): Schelfhout, S., Mertens, J., Verheyen, K., Vesterdal, L., Baeten, L., Muys, B., & De Schrijver, A. (2017). Correction: Schelfhout, S.; et al. Tree Species Identity Shapes Earthworm Communities. Forests 2017, 8, 85. Forests, 8(10), [355]. https://doi.org/10.3390/f8100366

Download date: 08. apr.. 2020





Correction

Correction: Schelfhout, S.; et al. Tree Species Identity Shapes Earthworm Communities. *Forests* 2017, 8, 85

Stephanie Schelfhout ^{1,2,*} , Jan Mertens ¹, Kris Verheyen ², Lars Vesterdal ³, Lander Baeten ², Bart Muys ⁴ and An De Schrijver ^{2,5}

- Department of Applied Biosciences, Faculty of Bioscience Engineering, Ghent University, Valentin Vaerwyckweg 1, 9000 Gent, Belgium; jan.mertens@ugent.be
- ² Forest & Nature Lab, Department of Forest and Water Management, Faculty of Bioscience Engineering, Geraardsbergsesteenweg 267, 9090 Gontrode, Belgium; kris.verheyen@ugent.be (K.V.); lander.baeten@ugent.be (L.B.); an.deschrijver@hogent.be (A.D.S.)
- Department of Geosciences and Natural Resource Management, University of Copenhagen, Rolighedsvej 23, DK-1958 Frederiksberg C, Denmark; lv@ign.ku.dk
- ⁴ Division of Forest, Nature and Landscape, Department of Earth & Environmental Sciences, KU Leuven, Celestijnenlaan 200 E, Box 2411, 3001 Leuven, Belgium; bart.muys@kuleuven.be
- ⁵ Faculty of Science and Technology, University College Ghent, Brusselsesteenweg 161, 9090 Melle, Belgium
- * Correspondence: Stephanie.Schelfhout@ugent.be; Tel.: +32-9264-90-46

Academic Editors: Laurent Augusto and Timothy A. Martin

Received: 14 September 2017; Accepted: 22 September 2017; Published: 27 September 2017

It has come to our attention that there was a mistake in this paper [1]: namely, the units of soil cations K^+ , Na^+ , Mg^{2+} , Ca^{2+} and Al^{3+} were written in $mg \cdot g^{-1}$ while they should have been in $\mu g \cdot g^{-1}$.

This mistake occurs in Table 1 on page 3 and Tables A3 and A4 on page 15; and, in Figures 4a and 5a–c on page 10 and Figure A1a–f on page 16.

Further, this correction is also needed in the following two lines: The line on page 11 "For the anecic species, $A.\ longa$ was only scarcely present when soil Al concentrations were higher than 50 mg·g⁻¹" should be "For the anecic species, $A.\ longa$ was only scarcely present when soil Al concentrations were higher than 50 μ g·g⁻¹"; and, the line on page 11 "In our study, burrowing earthworm communities (endogeic and anecic species) appeared to be abundant when exchangeable soil Al concentrations were lower than 100 mg·g⁻¹, and soil pH-KCl values were higher than about 4." should be "In our study, burrowing earthworm communities (endogeic and anecic species) appeared to be abundant when exchangeable soil Al concentrations were lower than 100 μ g·g⁻¹, and soil pH-KCl values were higher than about 4."

The authors would like to apologize for any inconvenience caused. The change does not affect the scientific results.

Here, we supply the corrected Tables and Figures.

Table 1. Mean and standard deviation of topsoil (0–5 cm) properties for each tree species across all six common gardens. Significant differences between tree species are indicated with letters, means with the same letter are not significantly different (Tukey post-hoc tests on linear mixed-effects (LME) models, 1 | Site).

Soil Variables (0–5 cm)				Tree Species						
	<i>f</i> -Value	р	Fraxinus	Acer	Tilia	Quercus	Fagus	Picea		
Moisture (%)	1475	< 0.001	$14\pm5^{\rm \ c}$	15 ± 4 $^{\rm c}$	12 ± 3 b	13 ± 4 bc	12 ± 4 ^b	9 ± 2^{a}		
pH-KCl	325	< 0.001	4.2 ± 0.6 $^{\mathrm{c}}$	$4.2\pm0.5^{\ c}$	4.0 ± 0.4 c	$3.7 \pm 0.3^{\ b}$	$3.7 \pm 0.2^{\ b}$	$3.5\pm0.2^{\ a}$		
Base saturation (%)	108	< 0.001	$73\pm28^{\text{ b}}$	$78\pm24^{ m \ b}$	$71\pm20^{\text{ b}}$	$49\pm20^{\ a}$	49 ± 21 a	41 ± 19 a		
K^+ in BaCl ₂ ($\mu g \cdot g^{-1}$)	50	< 0.001	$100\pm88\mathrm{b,c}$	$114\pm91~^{\rm c}$	$91 \pm 56 ^{\mathrm{bc}}$	85 ± 57 bc	67 ± 42 ab	41 ± 22 a		
Na ⁺ in BaCl ₂ ($\mu g \cdot g^{-1}$)	28	< 0.001	19 ± 16 a	17 ± 11 a	15 ± 8 a	13 ± 7 a	13 ± 7 a	38 ± 48 ^b		
Mg^{2+} in $BaCl_2$ ($\mu g \cdot g^{-1}$)	48	< 0.001	139 ± 106 c	$108 \pm 72 ^{\mathrm{bc}}$	81 ± 39 ab	68 ± 53^{a}	49 ± 32 a	57 ± 41 a		
Ca^{2+} in $BaCl_2$ ($\mu g \cdot g^{-1}$)	42	< 0.001	$1241 \pm 1020 ^{\ c}$	$1050 \pm 690 \mathrm{bc}$	796 ± 437 ab	481 ± 388 a	$446\pm293~^{\mathrm{a}}$	$467 \pm 351 ^{a}$		
Al^{3+} in $BaCl_2$ ($\mu g \cdot g^{-1}$)	42	< 0.001	$115\pm121~^{a}$	$87\pm58~^{a}$	$151\pm118~^{\rm a}$	$261\pm121~^{\rm bc}$	$231\pm105^{\rm \ b}$	$309\pm133~^{\rm c}$		

Forests 2017, 8, 366

Table A3. Mean and standard deviation of the deeper soil (5–15 cm) properties for each tree species across all six common gardens. Significant differences according to the Tukey post-hoc test between tree species are indicated with letters, means with the same letter are not significantly different (Tukey post-hoc tests on LME models, 1 | Site).

Soil Variables (15–30 cm)			Tree Species						
	<i>f</i> -Value	р	Fraxinus	Acer	Tilia	Quercus	Fagus	Picea	
pH-KCl	275	< 0.001	4.2 ± 0.58 c	4 ± 0.37 bc	3.9 ± 0.28 ab	$3.8 \pm 0.27^{\text{ a}}$	3.8 ± 0.17 ^a	3.7 ± 0.26^{a}	
Base saturation (%)	10	< 0.001	$60 \pm 36 ^{\mathrm{bc}}$	$60 \pm 30^{\circ}$	43 ± 27 ab	35 ± 28 a	36 ± 26 a	41 ± 32 a	
K in BaCl ₂ ($\mu g \cdot K \cdot g^{-1}$)	28	< 0.001	$38 \pm 17^{\text{ b}}$	$54 \pm 57^{\text{ b}}$	43 ± 35^{b}	46 ± 34 b	36 ± 23 b	$28\pm20^{\ a}$	
Na in BaCl ₂ ($\mu g \cdot Na \cdot g^{-1}$)	26	< 0.001	17 ± 19 a	13 ± 9 a	10 ± 5 a	9 ± 7 $^{\mathrm{a}}$	11 ± 6 a	$37 \pm 47^{\text{ b}}$	
Mg in BaCl ₂ ($\mu g \cdot Mg \cdot g^{-1}$)	16	< 0.001	77 ± 81 b	61 ± 61 b	33 ± 26^{a}	38 ± 42 ab	29 ± 25 a	53 ± 45 ab	
Ca in BaCl ₂ (μg·Ca·g ⁻¹)	18	< 0.001	$954 \pm 1049^{\ b}$	$659 \pm 603^{\text{ b}}$	$375 \pm 358 \text{ ab}$	$357\pm433~^{a}$	$312\pm288~^{a}$	$482\pm481~^{a}$	
Al in BaCl ₂ ($\mu g \cdot Al \cdot g^{-1}$)	57	< 0.001	133 ± 131^{a}	136 ± 87 ab	211 ± 118 bc	262 ± 133 c	$232 \pm 103 ^{\mathrm{bc}}$	248 ± 136 bc	

Table A4. Mean and standard deviation of the deeper soil (15–30 cm) properties for each tree species across all six common gardens. Significant differences according to the Tukey post-hoc test between tree species are indicated with letters, means with the same letter are not significantly different (Tukey post-hoc tests on LME models, 1 | Site).

		Tree Species						
Soil Variables (15–30 cm)	f-Value	p	Fraxinus	Acer	Tilia	Quercus	Fagus	Picea
pH-KCl	236	< 0.001	$4.4 \pm 0.57^{\text{ b}}$	4.2 ± 0.37 ab	4.0 ± 0.31 a	4.1 ± 0.4 ab	4.1 ± 0.43 ab	4.1 ± 0.37 ab
Base saturation (%)	4.0	< 0.005	60 ± 38	55 ± 33	39 ± 33	46 ± 33	51 ± 35	51 ± 39
K in BaCl ₂ ($\mu g \cdot K \cdot g^{-1}$)	13	< 0.001	29 ± 21	32 ± 38	29 ± 26	34 ± 29	27 ± 24	26 ± 22
Na in BaCl ₂ ($\mu g \cdot Na \cdot g^{-1}$)	17	< 0.001	$17\pm20^{\ a}$	12 ± 7 a	9 ,0 \pm 5,4 a	10 ± 9 ,5 $^{\mathrm{a}}$	13 ± 8 ,7 a	$42\pm58^{ m \ b}$
Mg in BaCl ₂ ($\mu g \cdot Mg \cdot g^{-1}$)	8.7	< 0.001	$76\pm94^{ m \ b}$	47 ± 59 ab	28 ± 33 a	51 ± 60 ab	43 ± 44 ab	58 ± 55 ab
Ca in BaCl ₂ (μ g·Ca·g ⁻¹)	13	< 0.001	1109 ± 1252 b	590 ± 694 ab	339 ± 402 a	522 ± 628 a	527 ± 524 ab	692 ± 733 ab
Al in BaCl ₂ (μ g·Al·g ⁻¹)	37	< 0.001	115 ± 113	128 ± 86	175 ± 105	175 ± 117	149 ± 97	149 ± 113

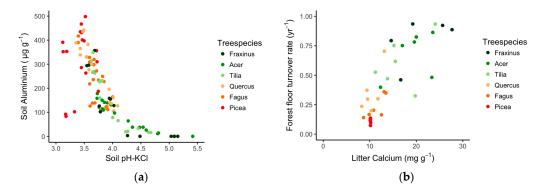


Figure 4. Relation between pH-KCl and exchangeable Al concentration in the 0–5 cm soil layer ((a) n = 105); In (b), the relation between Ca concentration in foliar litter and the forest floor turnover rate (n = 35) is shown. The points are colored according to the tree species. The foliar litter Ca concentration was previously published by Vesterdal et al. [36].

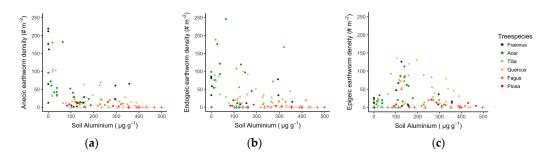


Figure 5. Cont.

Forests 2017, 8, 366 3 of 4

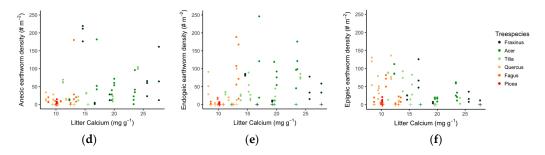


Figure 5. Relation between exchangeable Al concentration in the 0–5 cm soil layer (**a**–**c**) or Ca concentration in foliar litter (**d**–**f**); and density of anecic (**a**,**d**); endogeic (**b**,**e**); and epigeic (**c**,**f**) earthworms. Plots where zero earthworms were found are indicated by a cross symbol. The foliar litter Ca concentration was previously published by Vesterdal et al. [36].

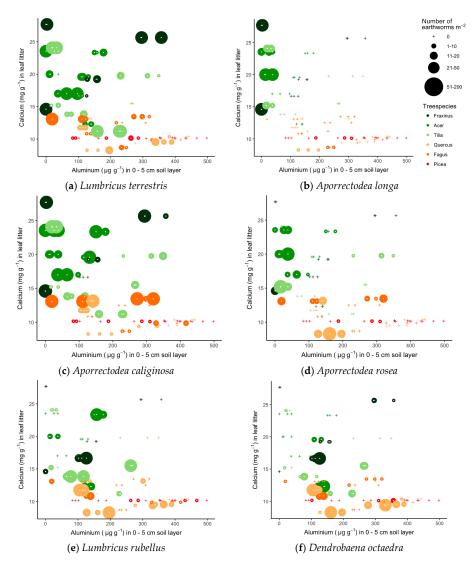


Figure A1. The density of the most common earthworm species (anecic: *L. terrestris* (**a**) and *A. longa* (**b**); endogeic: *A. caliginosa* (**c**); *A. rosea* (**d**); and epigeic: *L. rubellus* (**e**) and *D. octaedra* (**f**)) in relation with exchangeable soil Al concentration and Ca concentration in litter. Earthworm density is shown by the size of the circles; a cross symbol indicates plots where no earthworms were found. The color of the circle indicates the tree species. The foliar litter Ca concentration was previously published by Vesterdal et al. [36].

Forests **2017**, 8, 366

Reference

1. Schelfhout, S.; Mertens, J.; Verheyen, K.; Vesterdal, L.; Baeten, L.; Muys, B.; De Schrijver, A. Tree species identity shapes earthworm communities. *Forests* **2017**, *8*, 85. [CrossRef]



© 2017 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).