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Corrigendum

Drivers of forest structure and biomass along a climatic gradient in the Soutpansberg, South Africa, Trees, Forests and People, Volume 21, September 2025, 100945

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The authors regret that the formula used for calculating the above ground biomass (AGB) in the case of Mopane Woodland (Lisboa et al., 2024) was found to be not the most up-to-date formula available in literature. Thus AGB, related models and statistical tests were recalculated based on the most recent equation (Lisboa et al., 2025).

This resulted in a slight increase of AGB in the Mopane Woodland (comp. Table 1) compared to the previous equation. However, neither the model selection and statement (comp. Table 2), nor model-related figures (comp. Fig. 1) and statistical tests (comp. Table 3) were changed. Equations used for calculating the AGB in the Mistbelt Forest, the moist Mountain Woodland, the dry Mountain Woodland, the Ironwood Forest and the Lowveld Woodland remain unaffected.

For this reason, there is no impact on the discussion or conclusion of the study. Solely the numbers in the last sentence of the results chapter

Table 1
Changes in the equation and mean AGB for the Mopane Woodland calculations based on the literature used. While the first equations published (Lisboa et al., 2024) distinguished between stem and crown, the new formula (Lisboa et al., 2025) uses only one equation for calculating total AGB.

Literature	Formula	Mean AGB (±SE) [t ha $^{-1}$]
(Lisboa et al., 2025)	$\ln(AGB) = -2.373 + 0.916 \times ln(DBH^2 \times H)$	40.2 (±4.5)
(Lisboa et al., 2024)	$\ln(AGB_{stem}) = -2.882 + 0.904 \times \ln(DBH^2 \times H)$ $\ln(AGB_{crown}) = -3.343 + 0.927 \times \ln(DBH^2 \times H)$ $AGB = \ln(AGB_{stem}) + \ln(AGB_{crown})$	38.7 (±4.3)

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Table 2
Updated AGB model results for different models. No changes could be identified with regard to model selection, model statement and interpretation: Tab. 2 (Q-I environmental drivers with interactions); Tab. S 2 (Q-I single effects only); Tab; S 3 (Q-I same as Tab. 2 but without scaling/ standardization); Tab. S 4 (Q-I same as Tab. S 3 but with soil depth (SOD) instead of AWC); Tab. S 5 (Q-II environmental drivers + forest types); Tab. S 7 (Q-III dendrometric and structural variables + forest type). Given are coefficient estimates of intercepts and predicting model variables (dMI, SOD and TWI), as well as their interactions. The interaction dMI x TWI was not part of the selected AGB models; Standard errors are in brackets. Significance levels are shown with stars ($p < 0.05 = *$, $p < 0.01 = **$, $p < 0.001 = ***$).

	Term	Tab. 2	Tab. S 2	Tab. S 3	Tab. S 4	Tab. S 5	Tab. S 7
Intercept	a_0	*3.946***	*4.255***	*37.417***	*-1.807*	*5.517***	*4.110***
		(±0.111)	*(±0.110)*	*(±8.357)*	*(±2.280)*	*(0.132)*	*(±0.205)*
dMI	a_1	*0.252 $^{0.093}$*	*0.574***	*-4.271***	*1.591****		
		(±0.144)	*(±0.176)*	*(±1.197)*	*(±0.304)*		
AWC[1]	a_2	*0.329***	*0.226*	*-8.863****	*-13.668****	*0.229***	
		(±0.109)	*(±0.138)*	*(±1.886)*	*(±3.550)*	*(0.081)*	
TWI	a_3	*-0.339*	*0.006*	*-10.747***	*0.477*		
		(±0.214)	*(±0.190)*	*(±3.313)*	*(±0.742)*		
dMI x AWC[1]	a_4	*0.782****		*1.327****	*2.048****		
		(±0.165)		*(±0.280)*	*(±0.521)*		
dMI x TWI	a_5						
AWC[1] **x TWI**	a_6	*0.715***		*2.534***	*3.865***		
		(±0.198)		*(±0.701)*	*(±1.235)*		
Mean Height							*0.550****
							(±0.100)
CV-DBH							*0.201****
							(±0.049)
Canopy Cover							*0.209****
							(±0.051)
Ironwood Forest						*-0.586**	*1.029****
						(0.226)	*(±0.270)*
Lowveld Woodland						*-2.060****	*-0.230*
						(0.162)	*(±0.267)*
Mopane Woodland						*-2.048****	
						(0.148)	
Mountain Woodland dry						*-1.730****	*-0.191*
						(0.221)	*(±0.260)*
Mountain Woodland moist						*-1.150****	*-0.08*
						(0.165)	*(±0.203)*
R^2 Adj.		*0.734*	*0.492*	*0.734*		*0.925*	*0.980*
AIC		*298.1*	*316*	*298.1*		*261.0*	*221.9*
RMSE		*0.39*	*0.56*	*0.39*		*0.20*	*0.10*

[1] In the equation of Table S 4, soil depth (SOD) was used instead of AWC (available water capacity). However, due to reasons of uniformity and space, in this table, only AWC is given as the row heading for all columns.

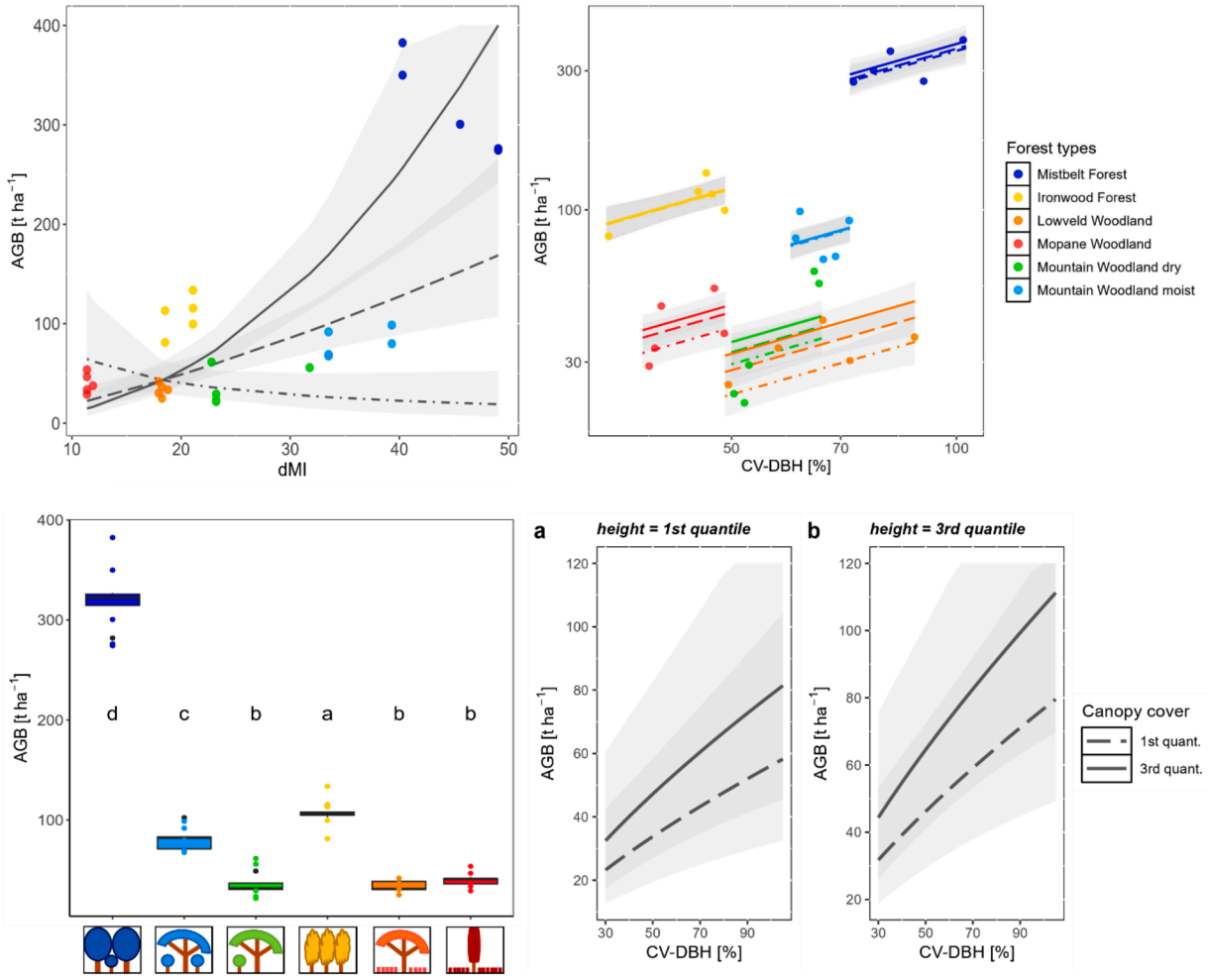

Fig. 1. Updated AGB related figures. No changes could be found.

Table 3
Updated ANOVA results from comparison of different AGB models. Statement and significance of comparisons remained unaffected: Tab. S 6 (comparison between Q-I environmental drivers vs. Q-II environmental drivers + forest types); Tab. S 8 (comparison between Q-II environmental drivers + forest types vs. Q-III structural and dendrometric variables + forest types). RSS = Residual sum of squares, Res. Df = Residual degrees of freedom, Δ RSS = difference in RSS between the models, Δ F = difference in F-value between the models.

	Tab. S 6	Tab. S 8
Model 1		
RSS	*4.593*	*1.248*
Res. Df	*24*	*23*
Model 2		
RSS	*1.248*	*0.296*
Res. Df	*23*	*21*
Comparison Model 1 & 2		
Δ RSS	*3.345*	*0.952*
Δ F	*61.629*	*33.738*
p-value	*<0.001*	*<0.001*

need to be adapted as follows: "A stand with a CV-DBH of 70 %, a canopy cover of 78 % and a below average (1st quantile) height, revealed a AGB of 59.9 t ha^{-1}, whereas a stand with the same CV-DBH and canopy cover values but an above average (3rd quantile) height, showed a AGB of 82.8 t ha^{-1}, which represents an increase of 38.2 %".

The authors would like to apologise for any inconvenience caused by these corrections.

References

Lisboa, S.N., Macôo, S., Sitoe, A.A.. Allometric equations and height-diameter models for estimating above-and below-ground biomass of Colophospermum mopane J. Léonard. in Mozambique. https://doi.org/10.21203/rs.3.rs-4125867/v1, 2024.

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