What is the composition and stoichiometry of food consumed by *Lumbricus terrestris*

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Question 1: Are there differences in elemental composition between food available and consumed by *L. terrestris*?

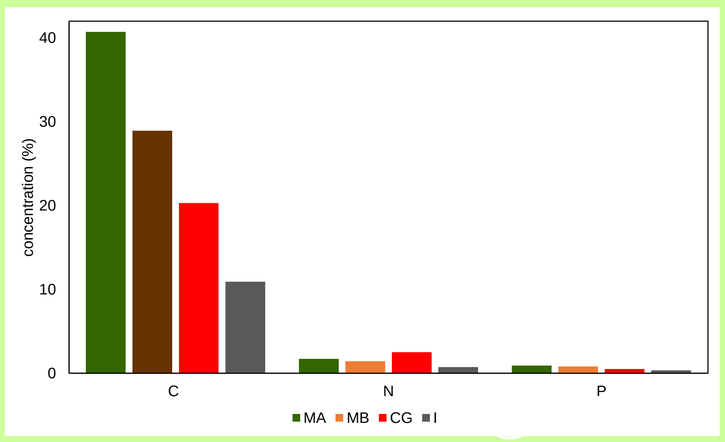
METHODS

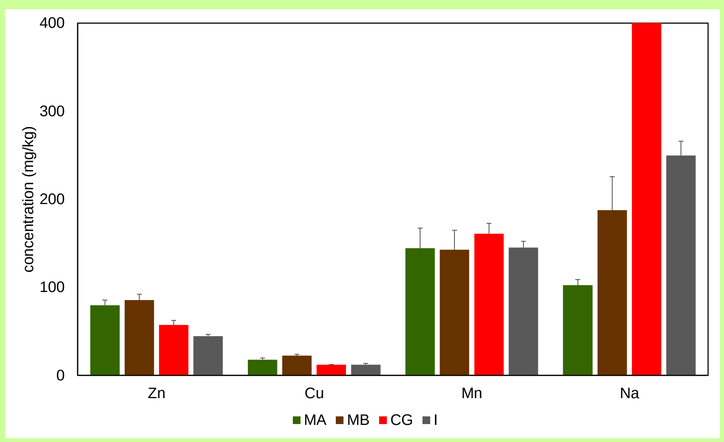
collected middens ← In the forest → collected earthworms

In the laboratory analyzed:

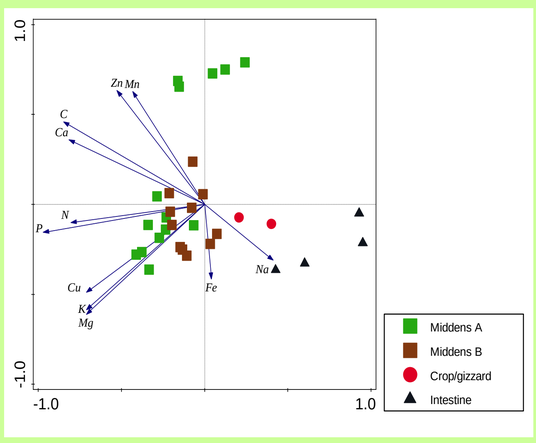
dissected crop and gizzard (**C/G**)
collected content from anterior part of intestine (**I**)

RESULTS

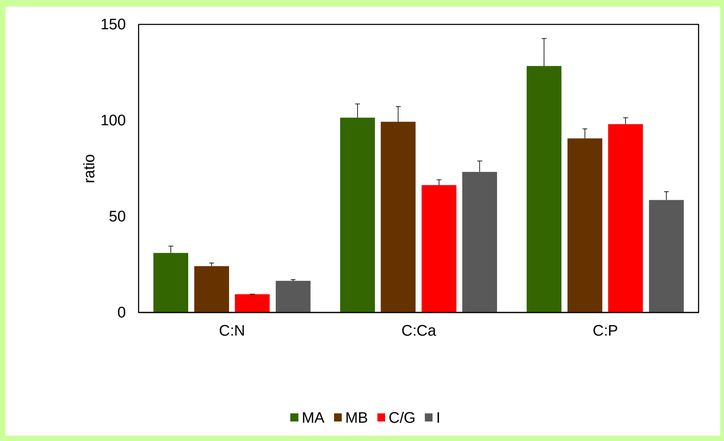




Elemental composition of middens, content of crop/gizzard and intestine



PCA ordination diagram of elements in:
middens,
content of crop/gizzard and intestine



Stoichiometric ratios of middens, content of crop/gizzard and intestine

Question 2: Are the observed differences due to selective feeding, or are they due to fluids (enzymes) in the digestive tract?

METHODS

Earthworms kept in boxes with moist filter paper → Analyzed: C/G content filter paper fom boxes controlt filter paper

RESULTS

	C%	N%	S%	C:N
Filter paper C/G	**41.98**	**3.441**	**1.357**	**14.2**
Filter paper experimental	**42.33**	**0.016**	**0.015**	**2988**
Filter paper control	**41.95**	**0.004**	**nd**	**13366**

CONCLUSIONS: „Experiment 1” suggested selective feeding on material containing more N and Na, but results from „Experiment 2” indicate digestive tract fluids as a source of increased level of N in crop/gizzard content