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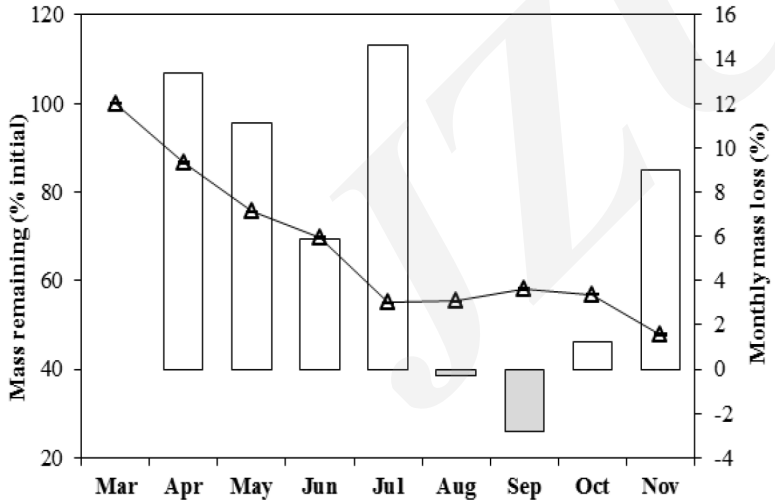
Tea polyphenols dominate the short-term tea (*Camellia sinensis*) leaf litter decomposition

Key words: Tea polyphenols, Catechins, Decomposition, Nutrient release, Polyphenol/N ratio

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Research summary

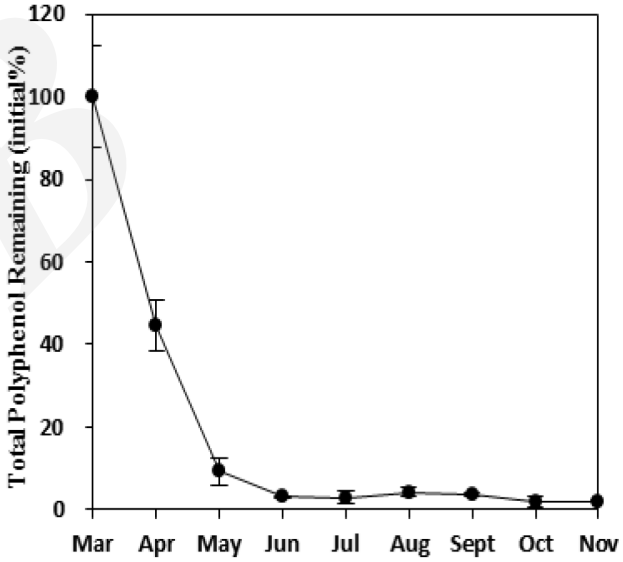
Main objective: Polyphenols are one of the most important secondary metabolites, and affect the decomposition of litter and soil organic matter (SOM). This study aims to monitor the mass loss rate of tea leaf litter and nutrient release pattern, and investigate the role of tea polyphenols played in this process.





Innovation points

- **Finding** a fast conversion process of tea polyphenols during litter decomposition
- **Testifying** the hypothesis that polyphenols control the decomposition of tea leaf litters
- **Emphasizing** the important role of tea polyphenols played in soil nutrient cycling



Sampling time	Catechins (mg.g^{-1})								
	GA	GC	EGC	C	EC	EGCG	GCG	ECG	CG
Mar.	0.50±0.00a	3.75±0.01a	12.34±0.01a	0.54±0.05a	4.85±0.03a	19.35±0.01a	0.56±0.01a	0.92±0.10a	0.74±0.02a
Apr.	0.07±0.01b	2.57±0.01b	0.67±0.01b	0.01±0.00b	0.04±0.00b	0.03±0.00b	0.15±0.00b	0.46±0.05b	0.58±0.01b
May.	0.05±0.01c	0.51±0.01d	0	0	0	0	0.09±0.00c	0.01±0.00c	0.09±0.03d
Jun.	0.03±0.00d	0.04±0.01f	0	0	0	0	0.02±0.00d	0.01±0.00c	0.03±0.04d
Jul.	0.03±0.01cd	0.15±0.01e	0	0	0	0	0	0	0.04±0.00d
Aug.	0.03±0.01d	0.70±0.01c	0	0	0	0	0	0	0.26±0.01c
Sep.	0.03±0.02d	0.67±0.01c	0	0	0	0	0	0	0.25±0.12c
Oct.	0.03±0.01d	0	0	0	0	0	0	0	0
Nov.	0	0	0	0	0	0	0	0	0

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