

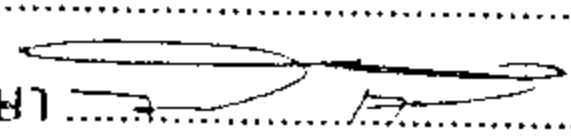
PUANGPAKA KAEWKROM : EFFECTS OF LITTER DECOMPOSITION ON
NUTRIENTS IN DECIDUOUS FOREST ECOSYSTEMS , HUAI KHA KHAENG
WILDLIFE SANCTUARY . THESIS ADVISOR : ASSOC. PROF. JIRAGORN
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In the tropical forest ecosystems , most nutrients is accumulated in biomass. Decomposition is the most importance process for nutrient cycling. This research studies litter production in 2 major deciduous forest ecosystem ; mixed deciduous and dry dipterocarp forest ecosystem , using litter trap method covering the entire leave shredding period for 4 months (December 1995-March 1996). Decomposition has been studied by litter bag method for 8 months (January-September 1996).

Results show higher litter production for 1 leave shredding season in mixed deciduous forest than dry dipterocarp forest ecosystem. Decomposition rate in mixed deciduous forest is also higher than dry dipterocarp deciduous forest ecosystem. Species diversity and density of meso-soilfauna are also higher in mixed deciduous forest ecosystem than dry dipterocarp forest ecosystem.

This research demonstrates the related mechanisms. Higher litter production and diversity in mixed deciduous forest result in higher diversity and abundant of meso-soilfauna in mixed deciduous forest ecosystem than dry dipterocarp forest ecosystem. This results in higher efficiency of decomposition processes , Which in turn overs more efficient in nutrient cyclings In mixed deciduous forest ecosystem. This is one of the significance reason making mixed deciduous forest to accommodate higher diversity and biomass of structure than dry dipterocarp forest ecosystem.

ภาควิชาชีววิทยา.....
สาขาวิชาสัตววิทยา.....
ปีการศึกษา 2539

ลายมือชื่อนิสิต พงษ์คม วัฒนคุณ
ลายมือชื่ออาจารย์ที่ปรึกษา 
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