

**Non-hotspot patch**  
(cover fraction:  $1 - m\%$ )

**Hotspot**  
(cover fraction:  $m\%$ )

**(a):** hotspot cover fraction  $m\%$   
can vary by location



Litter fall

N uptake

Litter sharing

Water &  
Nitrogen

Local routing

**(b):**  $sl_l$  and  $sh_g$

Topographic routing

**(c):**  $\theta > \theta_{th}$

Topographic routing

**Downslope patch family**

**Patch family**

