

formula	meaning
(1group)	random group intercept
$(x \text{group}) = (1+x \text{group})$	random slope of x within group with correlated intercept
$(0+x \text{group}) = (-1+x \text{group})$	random slope of x within group: no variation in intercept
$(1 \text{group}) + (0+x \text{group})$	uncorrelated random intercept and random slope within group
$(1 \text{site/block}) = (1 \text{site}) + (1 \text{site:block})$	intercept varying among sites and among blocks within sites (nested random effects)
$\text{site} + (1 \text{site:block})$	<i>fixed</i> effect of sites plus random variation in intercept among blocks within sites
$(x \text{site/block}) = (x \text{site}) + (x \text{site:block}) = (1 + x \text{site}) + (1+x \text{site:block})$	slope and intercept varying among sites and among blocks within sites
$(x1 \text{site}) + (x2 \text{block})$	two different effects, varying at different levels
$x * \text{site} + (x \text{site:block})$	fixed effect variation of slope and intercept varying among sites and random variation of slope and intercept among blocks within sites
$(1 \text{group1}) + (1 \text{group2})$	intercept varying among crossed random effects (e.g. site, year)