Chapter 9 Beyond complete randomization: blocking and covariates

Additional self-test questions

Q9.1 Your task is to compare the effect of four different garden slug-reduction strategies on densities of non-target invertebrates: is there anything you’d block on, or any covariates you’d measure?

Q9.2 For the experiment above, can you think of four different slug-reduction strategies?

Q9.3 In a breeding facility for the pet trade, you are tasked with studying the effect of different post-birth diets on the mother’s ability to bring up her young: is there anything you’d block on?

Q9.4 Some students studied the link between whether a leaf had a leaf miner in it and the extent of caterpillar damage. They used a paired experimental design, collecting each mined leaf and pairing it with the nearest unmined leaf prior to evaluation of caterpillar damage on them both. Discuss the advantages and disadvantages of this approach.