

To find out what proportion of seeds eaten by animals survive the passage through the alimentary canal and which seeds are distributed in dung. The experiment will relate seed size and structure with survival in animals with different types of digestive systems.

INFORMATION

1. You should select your seeds from those normally eaten by the animals e.g. oats, clover, medic, ryegrass, etc. and possibly include tomato which has a great reputation for survival. If the animals normally eat pellets you can make a mash of pellets and seeds and include these in the animal's food.
2. It would be interesting to include 2 animals with a contrasting alimentary canal e.g. hens and rats, sheep and horses.
3. A large animal like a horse produces a vast amount of manure, all of which will have to be washed and sieved so use a small animal unless you are very keen!
4. Rather than feeding animals you might like to collect pellets in the wild and see if they contain any seeds and if so, whether the seeds will grow. Almost nothing is known about the possible seed distribution by kangaroos, emus, bungarras etc. Emus are thought to be particularly important.

DESIGN OF EXPERIMENT

1. How will you incorporate seed into the animal's food?
2. How are you going to compare live seeds in initial samples (before ingestion) with material which has passed through the animal?
3. How are you going to measure seed survival?
4. How long does it take for food to get through the animal you are working on. How will you know when the material in which you are interested has come through?
5. How do you get rid of viable seeds in the food the animal normally eats?
6. How much seed are you going to feed the animals, is the seed addition to be the same for all animals?
7. How are you going to know how much of the seed addition the animal has eaten?
8. How are you going to be sure you collect all the animal's droppings?

REFERENCES

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