

Exercise 1: Identify topic and stress

Highlight topic and stress positions in each paragraph. For each item in a topic position, find if it links back to a previous sentence. For each item in a stress position, determine whether this item should have received stress. Finally, determine the topic of each paragraph.

Blood-feeding arthropods can transmit pathogens to vertebrate hosts when they feed. Feeding behaviors influence patterns of disease prevalence in mammal populations, and the long star tick (*Amblyomma americanum*) is an ideal study system for investigating the impact of feeding preference on transmission. This tick has been documented to feed on over 30 different species, but is believed to prefer feeding on white-tailed deer, racoons, and other medium- to large-sized mammals. However, these preferences have not been extensively studied or quantified. The bacteria *Ehrlichia chaffeensis* is transmitted by *A. americanum*, and white-tailed deer are the only known vertebrate reservoir of this pathogen.

What is the topic of this paragraph?

The Brazilian Cerrado is the largest, most speciose, and most endangered of the tropical savannas and the age, assemblage, and diversification patterns of its flora remain largely unknown. Several different vegetation assemblages comprise the Cerrado biome as a result of complex paleoclimatic and geologic history, a variety of edaphic conditions, and a diversity of rainfall regimes across its vast area. Campo rupestre is one type of vegetation assemblage usually found in sandy, acidic soils poor in organic matter and normally confined to exposed, rocky mountaintops above 900m in elevation.

What is the topic of this paragraph?

Hybrid vigor refers to the phenomenon that F1 hybrids display superior performance such as growth and yield compared to parents. Although hybrid vigor has been extensively used in agricultural industry, particularly in maize, its molecular mechanism remains unknown. Circadian clocks allow plants to anticipate daily changes in the environment, mediating daily metabolic processes and enhancing fitness in plants. My project describes molecular mechanisms of hybrid vigor by circadian clocks in maize.

What is the topic of this paragraph?

Exercise 2: Rewrite for correct topic and stress

Rewrite this paragraph such that the right elements appear in the topic and stress positions.

The sexual organs of angiosperms (flowering plants) are flowers. Pollen contains the male gametes of these plants. Insect pollinators have to carry the pollen of many angiosperms to the female parts of flowers. Honey bees are among the most effective pollinators.

Exercise 2: Rewrite for correct topic and stress

Suggested solution:

In flowering plants (angiosperms), flowers serve as the sexual organs. The male parts of the flowers produce male gametes in the form of pollen. The pollen has to be transported to the female parts of flowers for successful fertilization. For many angiosperms, pollen transport is carried out by insect pollinators, and one of the most effective insect pollinators is the honey bee.