

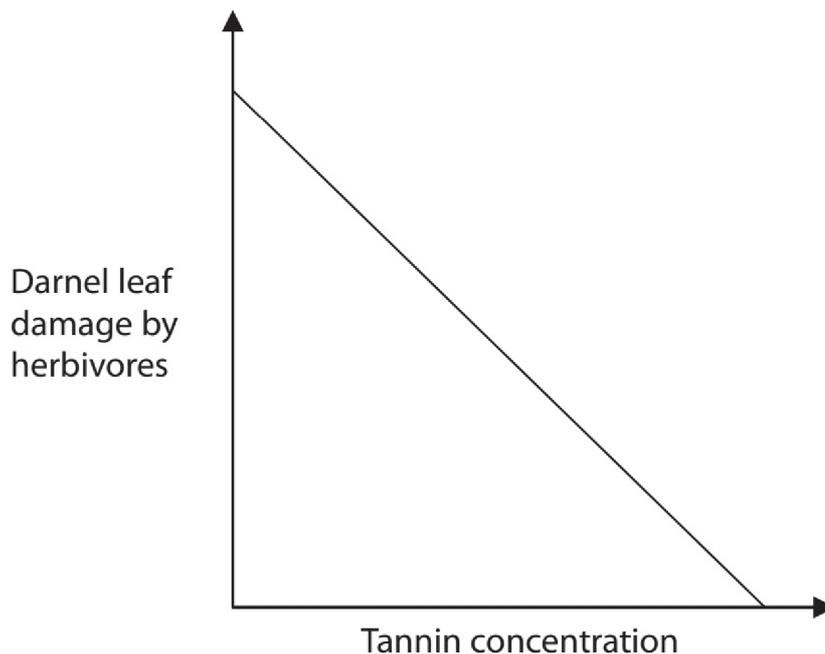
*(ii) The fungus and the plant both benefit from this relationship.

The fungus absorbs nutrients from the plant.

The expression of certain genes in the plant cells is increased when infected with the fungus.

These genes are involved in the synthesis of tannin and flavonoids.

The graph shows the relationship between tannin concentration and the degree of darnel leaf damage by herbivores (grazing animals).



The table shows the antimicrobial effect of different concentrations of flavonoids on cultures of the bacterium *Pseudomonas aeruginosa*.

This bacterium causes disease in plants.

Flavonoid concentration / $\mu\text{g cm}^{-3}$	Diameter of inhibition zone / mm
500	7.0
666	8.0
1000	9.0