Low nutrient levels lead to striking adaptive mechanisms

Bog bed

Carnivorous plants use specially adapted leaves to trap and digest insects and other small animals. These plants occur in extremely nutrient-poor habitats such as bogs or cliff faces, and so need this extra source of nitrogen and other nutrients.

Photos:

1 **Flypaper traps** use a sticky secretion from the tips of small glands on the leaves. Insects and other small animals are attracted by the odour of the secretion and remain stuck to it whilst they are digested by the plant (e.g. Portuguese sundew, *Drosophyllum*). Photo: L. Köhler

2 **Snap traps** rely on the rapid closing of the two halves of the leaf, which is activated by the movement of prey against small trigger hairs on the inside of the leaf (e.g. Venus fly trap, *Dionaea*). Photo: L. Köhler

3 **Bladder traps** function under water. The plant creates a partial vacuum inside the trap that is released by movement nearby, sucking the prey into the trap (e.g. bladderworts, *Utricularia*). Photo: M. Stange

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Experimental Botanical Garden

More information