Self Pollinating Orchid

Written by Administrator Wednesday, 10 July 2013 02:46 -

Self pollinating orchid found according to a report in *Nature*, vol. 441, p945, 22 June 2006. Flowers are fertilised when pollen is placed on the stigma, the female part of the flower. Although most flowers produce pollen they rely on outside agents, such as insects, to bring pollen to their stigma and take their pollen to another flower. A group of Chinese biologists have studied the flowers of an orchid named

Holcoglossum amesiamum

and found that the flower actively pollinates itself, without any outside help. The pollen is packaged into two pollinia on the end of a flexible stem called a stipe. The stigma sits in a cavity with a roof above it. When the flower first opens the pollen is covered by an anther cap and the stipe is folded back over the roof of the stigma cavity. When the flower is fully open the stipe rises up, curves forward and downward and inserts the pollen onto the receptive surface of the stigma. The orchid normally grows high in trees growing in still, dry conditions at altitudes of 1,200 - 2,000m in China and south-east Asia. The researchers concluded: "The present self-pollination mechanism is likely to be an adaptation to the orchid's dry and insect-scarce habitat and may be widespread among species growing in similar environments."

Editorial Comment: This orchid is a most attractive flower that has pretty pale pink and mauve petals and a striped pattern below the stigma, and is listed on gardening websites as a fragrant orchid. All of these features are considered to be adaptations for attracting pollinators. However, as the study described above clearly demonstrates, the plant does not need to attract pollinators. So, why is it beautiful?

The question of beauty came up at the recent debate at Northampton University where the evolutionists insisted that beauty in living things such as flowers and butterflies can be explained by sexual selection. However, that is not the case for this orchid, and it is not the only self-fertilising beautiful flower. Sweet peas have fragrant colourful petals but they fertilise themselves.

The distinctive patterns on butterfly wings cannot all be explained as sexual selection either. Approximately half the species of Heliconius butterflies reproduce by pupal mating. The male butterflies emerge from the pupae before the females. The fully developed, but unopened female pupae emit pheromones that attract the males. The males open the pupal cases and mate with the females before they emerge. Many years ago Eric Laithwaite, a keen amateur butterfly collector, commented on this behaviour in an interview with Robyn Williams of the ABC (Australia) "Science Show". After describing the process of pupal mating, he said he had "a question for God and Darwin, i.e. why were these butterflies visually attractive when they didn't see one another when it mattered." We believe God gives us a clue in Genesis 2:9, which states the trees in the Garden of Eden were pleasing to the eye as well as good for food.

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Beauty does matter to God, Who also gave mankind made in His image, an appreciation for beauty. While most beautiful things in the created world also have a practical function, there are some that cannot be explained in purely function terms. The fact that this beautiful and fragrant Chinese orchid can reproduce in a "dry and insect-scarce habitat" does explain that it can survive because it already has a well designed method of self pollination. It does not explain how such a method of pollination evolved at all. (Ref. pollination, beauty, flowers)

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