

## THE MOCCASIN FLOWER WAS DESIGNED

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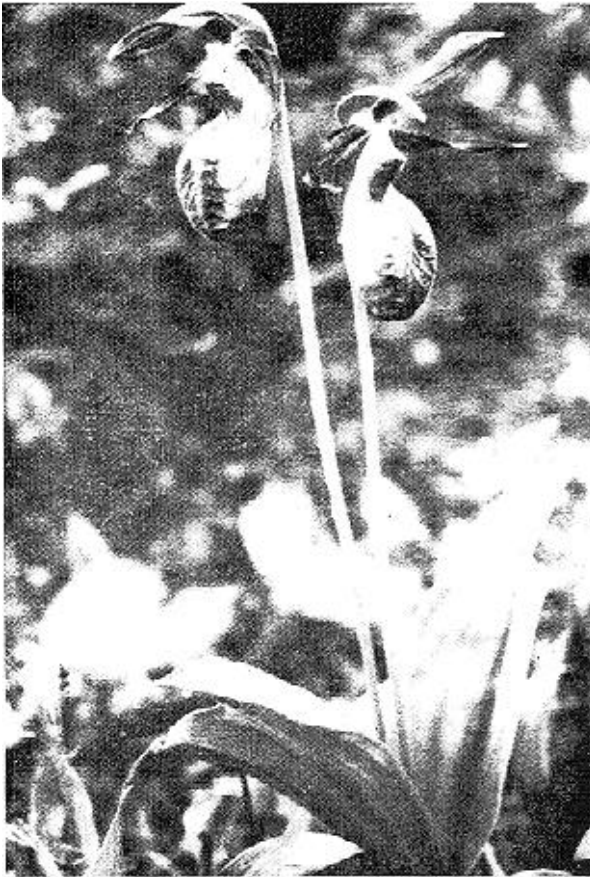


Figure 1. The pink moccasin flower, *Cypripedium acaule*.

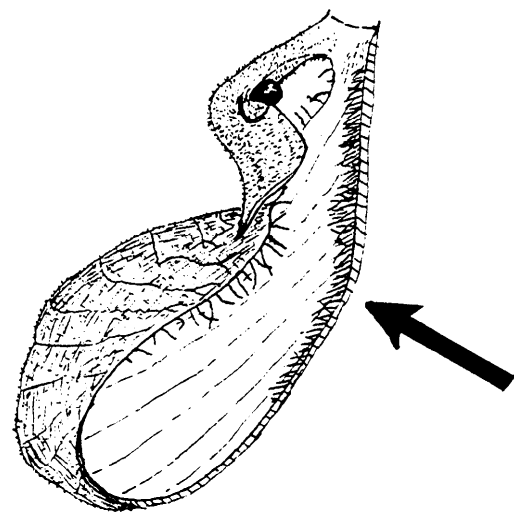
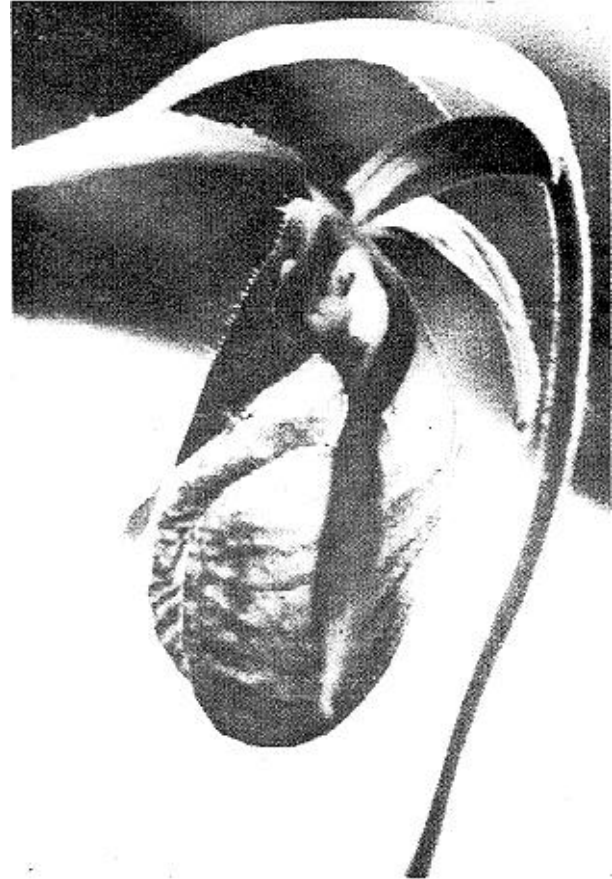


Figure 2. A close-up of the moccasin flower (above). The illustration (below) shows the "ladder" of interior hairs (indicated by the arrow) used by bees in climbing out of the flower; and thus, being forced to contact stigma and anther, they pollinate the flower.

Gardeners who have recognized the beauty of the pink moccasin flower (*Cypripedium acaule*), shown in Figure 1, have usually been frustrated in their attempts to grow it from seed, or to transplant it. Those who truly appreciate the flower have learned to leave it where they find it, unless there is certain destruction of the particular growth site.

But there are other problems with the pink moccasin flower. The explanations put forth by evolutionists are inadequate to account for the intricate designs and ecological relationships involved in pollination and early growth of this flower.

Actually in the process of pollination, the bee is attracted to the flower but does not really gain any food. Thus according to evolutionary reasoning the very existence of this flower, and other slipper flowers, seems precarious. The pollination action of the bee is merely a wasted effort on the part of the bee, and seems to have no survival value for the bee. Therefore, if a different bee came into existence that avoided these kinds of flowers, there might be some selective advantage for that bee. Then in time the slipper flowers would not be pollinated and would become extinct.

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After alighting on the flower, the bee soon enters or falls into the pouch of the moccasin. Entrance is usually made through the fissure along the "instep" of the moccasin. The steep sides of the pouch and the infolding margins of the fissure make escape by the same route impossible.

However, there is a way of escape from the moccasin flower. The bee grasps onto a row of hairs (see Figure 2), which form a sort of ladder, and quite effectively climbs out of the pouch. As the bee climbs out, it first rubs the stigma, depositing pollen from its body onto the stigma. Then the bee rubs against an anther picking up a supply of pollen, some of which will be left as it climbs out of the pouch of another moccasin flower.

Like the seeds of most orchids, the 15,000 to 50,000 seeds of a single pink moccasin flower are minute and contain a very small food supply. After germination the roots must be invaded by a fungus that supplies carbon and perhaps some vitamins.

Thus the moccasin seedling is a saprophyte, utilizing the fungus material as food, until it is large enough to become autotrophic. The fungus can exist separately, but does exceptionally well in the presence of the orchid roots. This is known as a symbiotic relationship.

The great amount of speculation involved in explaining the origin of such mechanisms, from the evolutionary point of view, really leads one to believe that the whole scheme is more imaginative than scientific.

The vast difference between the four genera of slipper flowers and all other orchids led Darwin to speculate that an enormous wave of extinction swept away a multitude of intermediate forms.<sup>1</sup> Because of the vast differences, creationists assume that these slipper flowers were created separately from all other orchids. They may represent one or a few created kinds.

It is true that many crosses are possible between species in some of the genera; and a generic cross is possible between *Selenopodium* and *Cypripedium*.<sup>2</sup> A created kind, with a great potential for variation, could degenerate along different lines until it could not cross with other individuals within the created kind. Such an explanation is proposed in place of "emergence" of the different slipper flowers from some so-called common ancestor.

#### References

- <sup>1</sup>Szczawinski, A. F. 1959. Orchids of British Columbia. British Columbia Provincial Museum, Victoria, p. 23.  
<sup>2</sup>Schultes, R. E. and A. S. Pease. 1963. Generic names of orchids. Academic Press, New York, p. 331.

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## A THOUSAND YEARS OR A DAY?

Recently a correspondent quoted 2 Peter 3:8, ". . . one day is with the Lord as a thousand years, and a thousand years as one day," in defense of the possibility of a very old universe. In fact, that quotation is used quite often for such a purpose, sometimes in connection with the "age-for-a-day" thesis. May I suggest, however, that the point of the quotation, with regard to original context, is quite the opposite?

Clearly Peter was quoting Psalm 90:4. Now in that context, the point is plainly that, compared with God, all created things are transient, and of a short duration. So far from providing evidence for a great age for the universe, the quotation might actually be used to support the teaching that the universe is relatively young.—*Editor*

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## AN APPROPRIATE QUOTATION

The World was made to be inhabited by Beasts, but studied and contemplated by Man: 'tis the Debt of our Reason we owe unto God, and the homage we pay for not being Beasts. Without this, the World is still as though it had not been, or as it was before the sixth day, when as yet there was not a Creature that could conceive or say there was a World. The Wisdom of God receives small honour from those vulgar Heads that rudely stare about, and with a gross rusticity admire His works: those highly magnifie Him, whose judicious inquiry into His Acts, and deliberate research into His Creatures, return the duty of a devout and learned admiration.—Sir Thomas Browne, from his *Religio Medici*