

BOTANY

Giant "Sacred Lily of Africa" Makes Vegetable Gas Attack

Botany Students Are Driven from Laboratory While Odor Calls Afar for Carrion Flies

A GIANT flower that became a gas attack and drove a botany class out of its laboratory, is described by Prof. H. S. Conard of Grinnell College.

The plant is a relative of the calla lily and the Jack-in-the-pulpit, but sends its single flower-stalk to the height of a grown man. It is cultivated to a small extent as an oddity, but is seldom seen in bloom. Perhaps fortunately so, for it has a most overpoweringly bad odor when it does open.

It is commonly called "sacred African lily," but is neither a lily nor African, and anybody who once smelled it would hesitate to call it sacred.

Prof. Conard describes what happened in his laboratory:

"The bulb was about a foot in diameter when purchased. It was said to be six years old. It received no treatment at all, but was allowed to sit on the table in the living room. The shoot, already eight inches tall, soon began to stretch upward.

"Gradually the flower bud pushed out of its sheaths, and rose on its mottled two-inch stem to the total height of five feet, nine inches. The flower itself was nearly three feet tall. As it completed its stature, the gigantic calla-shaped blossom began to unfold. But not until it had reached its full maturity did it tell its story. And then it was indeed 'loud.'

"I first saw the flower, apparently in full splendor, on a Sunday afternoon, after invitations to visit it repeated for at least a week. The flower had a decidedly unpleasant odor, but it was kept in the dimly lighted, cool living room without giving much offense.

"The owner kindly offered me the privilege of taking the plant to my botany laboratory for the classes to see. So I drove over early Monday morning and got it. The odor was rather strong already.

"After two hours in the warm, bright classroom, the odor became a terrific stench of carrion that permeated the

whole floor of the building. 'Another mouse' thought my associate, as she entered the third room away, and started in search of the trouble. She followed her nose into the presence of the gigantic flower.

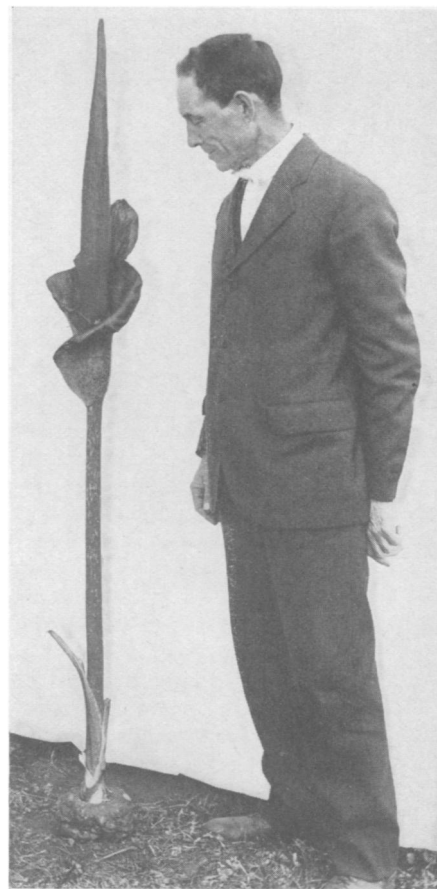
"Through Monday, Tuesday and Wednesday the odor was simply unbearable. We exhibited the plant a few minutes to each class, and then hurried it to a cold room with open windows. On Thursday morning the odor was scarcely audible. I looked into the great flower, and the stamens were wilted; the time for pollination was past. On Friday the huge spadix had crumpled over, and on Saturday the whole thing went into the flowerpress and the pickle jars.

"And now it was evident what it was all about. The pollen is carried from the cluster of staminate flowers to the pistillate flowers of this or another plant by carrion flies. The odor would lure them from long distances. The deep crimson-maroon spadix and inside of the spathe had the color of raw bloody drying flesh. The lurid greenish and tawny mottling of the outside of the spathe had exactly the tints of a putrid carcass.

"To the blurred vision of a fly, guided more by scent than by sight, the imitation is doubtless perfect: dead meat set up conveniently on the top of a stalk! And the odor was exhaled adaptively, and not by haphazard, nor even by decay. The scent glands were active only during the three days during which the visit of flies could serve the useful purpose of pollination. No effort was wasted. The valves were opened and closed on schedule time.

"So in spite of its unhappy selection of insect friends, I hand it to this weird flower for the most astounding adjustment of structure and behavior in making the environment serve its living ends. That is what living things always do. They seem to command the environment, of which they are really the products."

Science News Letter, March 21, 1931



VEGETABLE GAS ATTACK

The "sacred African lily" which is neither a lily nor African, and which anybody who once smelled it would hesitate to call sacred. Prof. H. S. Conard of Grinnell College is examining the plant.

ORNITHOLOGY

Crow-Eating Fishermen Capture Sea Eagle

TO EAT CROW is to most of us the nethermost degradation of diet, but fishermen on a part of the coast of East Prussia use crows for food. During their migrating season they catch them in nets, killing the captured birds by biting their skulls, reports Dr. Theodor Ahrens, of Berlin.

Ornithologists take advantage of this strange game-taste of the fishermen by persuading them to release a part of their catch with identifying bands on their legs, so that their migrations may be traced through later recaptures.

Sometimes the fishermen make unlooked for catches in their aerial nets. Recently they took a sea eagle with a wingspread of about seven feet. The bird was turned over to scientists, who banded, photographed and released it.

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