

This is another agency which is engaged in the application of biological knowledge to the control of pests which are

detrimental to human welfare and offers another avenue for the employment of professional biologists.

The Morphological Mystagogue

ARTHUR J. BAKER

Crystal Lake Community High School, Crystal Lake, Illinois

Fellow pedagogue, if you are one who may be of the opinion that there is no room in teaching for a bit of the thespian, then this is not for you. As good food is improved by spices, as a flower is made more desirable by its scent—so, too, is good teaching able to better impress and instill scientific fact by an occasional use of the dramatic.

The differences between Monocotyledoneae and Dicotyledoneae, subdivisions of the class Angiospermae, had been presented to my biology classes by the usual methods of text and reference readings, lecture and explanatory charts. A brief outline of the next day's class follows. In your writer's opinion, it transformed a bit of dry (to the average high school student) material into something vital, meaningful and most worthwhile.

"Come up here, Jerry. Thank you. Jerry, this is the magician's throne; and you are now KING OF THE MYSTICS. Take your throne, and if you promise to hold in your right hand this baton, the symbol of magic power, you shall be gifted immediately with a profound knowledge. In short, Jerry, yours is so great a gift that you can answer questions correctly, even though you think you do not know the answers."

"Jerry, how many petals are there on the flower of the Iris? Do you know the answer to that?"

"Well," said Jerry, "A neighbor of ours had some in her flower garden

that were in bloom last, let's see now, June, I think it was. But, Gosh, I couldn't remember how many petals they had."

"You see, class, Jerry, the biology student, cannot answer the question put to him. But wait—I'll wager Jerry the Mystic can do it."

At this point the instructor takes from his desk a bottle containing a preserved Iris leaf and hands this to the student.

"Now, Oh mystic, examine this leaf of the Iris closely. While you do this, please be waving the magic baton over the bottle. Fine. Now the number of petals on the Iris can be found somewhere between one and one thousand. I shall give you but three chances, my mystic. Can you come through for us?"

Jerry mumbles something about paralleled veins, then says, "I have it now! It *must* be three, six or nine. No wonder you gave me three chances. From what I remember from the size of the flower, it is most likely nine."

"Nine is right, Jerry. One chance in a thousand and he bats a perfect score. Shall we try him again, class?"

A chorus of "Yes, yes" comes from the class.

"Make ready, mystic. On yonder North window is an African Violet in bloom. Can you tell us the number of petals on its flower?"

"I guess I'm stumped again—but could you let me see a leaf?"

"Surely. Betty, snip off a small leaf

of the violet with these scissors and give it to our Mystic friend, please.”

Jerry again examines the leaf.

“Wave the wand of magic and call a number from one to one thousand, Jerry. What do you say, oh man of wisdom?”

“I’ll say five!”

“*Right again!*”, squealed Betty, who had taken a peek while collecting the leaf.

“And now, my sage, rest not on your laurels, but gird your loins for the truly acid test.” (From his lab coat the instructor takes a seed of a lemon and hands it to the young magician who is now enjoying his role with genuine enthusiasm.)

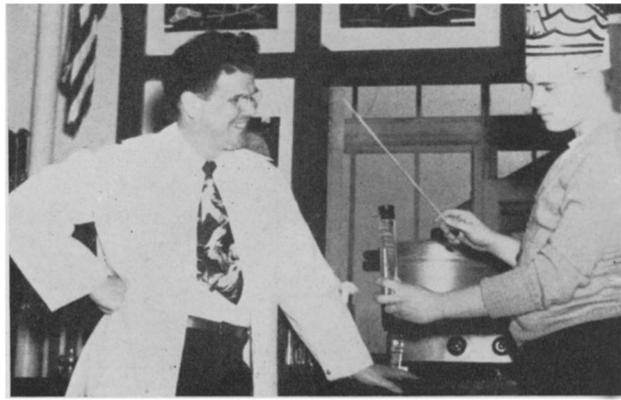
“Regal man of thought, please inform the class as to whether you have ever seen a lemon tree.”

“No, I have never seen a lemon tree,” replied Jerry, but he can hardly suppress a smile as he examines the seed. He is really in the swing of the reasoning now and having a grand time.

“Wave the wand of great thought, wise one, and with this scalpel examine the lemon seed closely.”

Jerry quickly discerns the seed to be a dicot.

“Now, my Wizard, inform the class as to the nature of the leaves and flowers of the plant you have never seen.”



Jerry enjoys his role as MYSTIC RULER. Photo by George Lindberg, student in Crystal Lake Community High School.

“I have quite a clear picture of this lemon tree,” replies Jerry, now waving the wand and going through magic motions to the delight of the class. “The leaves are net veined and the flower parts are probably in groups of fours or fives. I’ll even go further and surmise that if the stem of this plant were cut, the vascular bundles or tissue would form a cylinder rather than being scattered like in a corn stem.”

“Splendid, Jerry. Very well done, indeed. You may take your seat now and I want to thank you sincerely for the part you have just played in impressing upon all of us the importance of at least a meager knowledge of plant morphology. Jerry has described the flower, stem and leaf of a plant that he has never seen. All he needed was a look at the seed. Go forth, ever applying your knowledge of science, class—then all of you shall truly be mystics.”

Membership

Although under the present plan this is not the end of the fiscal or membership year, it is a break in the school year and therefore a logical time to take stock of membership. In previous years the annual membership report was made in May, the nearest issue to the end of the fiscal year.

This report is not strictly comparable to those of previous years but is approximately so. There are still a few short term and

irregular memberships as a result of the change of fiscal year and the fact that Volume 9 had eleven numbers instead of the usual eight.

In the following table the figures for 1945 and 1946 are the total memberships for the fiscal years 1944-5 and 1945-6 respectively; the figures for 1947 and 1948 are as of approximately May 1. This is of course not the total membership for the year but does