after the small doses used but are marked in animals in the shocked state induced by acute reduction of cardiac output. Robson and others (*3*) report that the closely related 2,3-dimethyl-5-aminoindole inhibits carbachol stimulation of the isolated, diestrus uterus, another fact that suggests a sympathomimetic action.

MEAIN in large enough doses (100 or more times the challenge dose of serotonin) does prevent the pressor response to serotonin but not the reflex effects (*1*). However, the same is true of ephedrine for the duration of its pressor effect. Moreover, the direct vascular effect of serotonin is enhanced after the blood pressure has returned to normal following a single injection of ephedrine or during a tachyphylactic state following repeated doses of ephedrine, further indicating the effect of altered vascular reactivity.

These observations, which suggest an ephedrine-like activity of MEAIN, appear to be applicable also to a 2-methyl-3-ethyl-5-dimethyl aminoindole (Medmain). The toxicity of this compound, given intraperitoneally to mice in doses that approximate 150 to 300 mg/kg (5 to 10 mg per mouse), impresses Woolley and Shaw (*4*) as being "remarkably similar to the seizures of human epilepsy," but the description also parallels closely the description of ephedrine toxicity (*5, 6*), if one substitutes respiratory stimulation for hyperventilation and tonic convulsion for opisthotonus. It is doubtful whether the pharmacologic properties of this substance are specific enough to permit inferences about the genesis of disease entities (*7*).

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24 May 1954.

Peculiar Physiological Behavior in Rice (*Oryza Sativa*)

A wide disparity in the flowering time of the parents is one of the chief handicaps of a plant breeder for hybridization in rice or, for that matter, in any crop. The usual methods adopted by breeders to synchronize flowering time are (i) periodical sowings, (ii) photoperiod treatment, and (iii) seed vernalization. Although the first method is simple, the second and third are cumbrous, time-consuming, and expensive. In a search for a simpler method of synchronizing flowering, an interesting physiological phenomenon was encountered.

Table 1. Mean flowering duration in days.

Pot size (in.)	Number of seedlings per pot			Mean
	One	Two	Three	
	1950–51 results			
6	150.4	148.2	159.0	152.5
9	141.8	145.2	146.0	144.3
12	131.6	137.6	139.2	136.1
Mean	141.3	143.6	148.1	
Critical difference for comparing: means within a treatment, 2.39; marginal means, 1.38.				
	1951–52 results			
6	136.4	147.8	148.2	141.1
9	121.2	144.0	151.8	139.0
12	125.4	137.6	136.2	133.1
Mean	127.7	143.1	145.4	
Critical difference for comparing: means within a treatment, 6.64; marginal means, 3.83.				

In the (1950–51) second crop season (Nov.–Apr.), 30-day-old seedlings of a rice variety from Madras (G.E.B.24) were transplanted in different-sized pots with varying numbers of seedlings. Pots with face diameter and height of 6, 9, and 12 in. were used; and one, two, or three seedlings were transplanted in each pot size. There were nine treatments with five replications. The time of first flowering for each treatment was noted. The experiment was repeated in the 1951–52 second crop (Nov.–Apr.) season. The results obtained are given in Table 1.

The 2-yr experiment results show that (i) the flowering duration is delayed by reducing the size of the pots from 12 to 6 in., (ii) the flowering duration is delayed by increasing the number of plants per pot from one to three, and (iii) the maximum difference in flowering duration is obtained between treatments growing only one plant in the largest pot size and three plants in the smallest pot size, the difference observed being 23 to 27 days.

To ascertain whether the flowering-time difference in different pot sizes was due to the volume of soil contained in each, the following experiment was conducted. The ratio of the volume of soil held by pots of face diameter 9, 12, and 15 in. is 1:4:7. Hence in 9-in. pots, one rice plant was transplanted; in 12-in. pots, four plants; and in 15-in. pots, seven plants. There were six pots of each size. The time of first flowering was noted in each case.

That the nutrients contained in the soil do determine the flowering duration is clear from Table 2, wherein for a unit volume of soil per plant, the flowering occurs almost simultaneously. Horticulturists (*1*) hold that the higher the level of nutrition available, the better will be the vegetative growth and the longer the commencement of the reproductive phase is postponed. With a lower level of nutrition, plants flower earlier. Nitrogen manuring on some of the cereals of the temperate region has a similar effect (*2*). But nothing

Table 2. Results obtained by giving equal volume of soil for each plant.

Pot size, face diameter and height (in.)	No. of plants per pot	Mean flowering duration (days)
9	1	135.3
12	4	130.1
15	7	131.7

Critical difference for comparing two-treatment means, 21.51.

seems to have been noted in the case of rice, a tropical crop. On the view that a lower level of nutrition hastens flowering, the 6-in. pots with three plants in each should flower earlier than 12-in. pots with one plant in each, since the quantity of nutrients available per plant must be much lower in the former case. Still the latter comes to flower earlier than the former, contrary to expectations. This may be due to one of the following reasons: (i) starvation does hasten flowering up to a particular nutritional level, beyond which the heading time is delayed, or (ii) the principle that starvation hastens flowering does not hold good for rice. Whichever contention is correct can be verified only by further experimentation. Facilities for sand culture do not exist at this institute. It is hoped that work in institutions where such facilities exist can clarify the position.

The finding that a difference of more than 3 wk in the time of flowering can be obtained by manipulating the number of plants in different-sized pots and should be a useful addition to the methods employed for overcoming the difficulty of crossing period-fixed varieties of different durations.

We are grateful to N. Parthasarathy, director, and R. L. M. Ghose, geneticist and botanist, Central Rice Research Institute, for reading this manuscript and making helpful suggestions.

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7 December 1953.

Emeritus House*

I have had more than half-a-century of experience in the field of glass technology and research and still study the current literature daily. I have, during this period, produced or improved practically all types and colors of glass. Since my retirement from teaching in the fall of 1951, I have had to engage in consulting practice to augment inadequate retiring allowances, social security, and annuities. This is not a complaint, for my wife and I are able to live as well as we did on my teaching salary. Also, the work is interesting. However, posterity will be deprived of the fruits of my experience, unless their recording is rendered possible through subsidies that would enable me to devote my time to writing and would provide the necessary secretarial facilities. With 46 years of experience in the teaching of chemistry, a volume, or volumes, on "The Chemistry of Glass" should result. At present, there are no books of this title, and only occasional individual papers have appeared in science journals.

What has been cited is only one of many cases in which capable and experienced individuals, who have treasures to record for posterity, either cannot afford to do so, or lack the facilities. What shall we do to conserve this precious knowledge?

It is my thought to establish what I choose to christen "Emeritus House." Such a building purchased or constructed near a high-class library center would furnish office and study facilities for professors emeriti, who should be selected by a competent screening committee consisting of active authorities in various branches of the arts and the sciences. These terms are used in a very broad sense instead of listing the many possible fields encountered in education. Capable clerical and secretarial help and equipment that would facilitate the recording of findings should be provided. Another screening committee could evaluate the literature that is created and decide whether a project should be continued. If approved for publication, arrangements should be made for the private or licensed printing of recordings.

What about the financing of such a project? It is my thought that a haven for creative work should be subsidized by industry (a real benficiary in the fields of science, technology, economics, and so forth), by interested individuals, and by foundations. I use the term *subsidized*, advisedly. Endowments bring returns that vary, and they alone are too uncertain. Let us remember that in some worthy cases it may be necessary to afford salaries or subsistence grants to appointees. Above all, it is essential to let these savants devote themselves, carefree, to their work.

After the establishment of the first "Emeritus House," say in Pittsburgh, a leading industrial center of the world, other "Emeritus Houses" could be created in other centers all over the United States. They should furnish a precious literature for those lovers of democracy who wish to perpetuate the good and the fine things of life.

This recommendation merely suggests a principle. It makes no pretext of covering the numerous details that must be considered by those who would plan and establish "Emeritus House."

Alexander Silverman

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* A paper presented before the Pennsylvania Academy of Science, in Pittsburgh, 17 Apr. 1954.

23 April 1954.