

stroboscopic means of a fluorescent lamp containing such phosphors and operating on AC will show two colors; first, the combined color of the phosphor and the discharge and second, the color of the phosphor alone. In all low-voltage fluorescent lamps, the color of the discharge is the typical blue color of the low-pressure mercury discharge, and it passes through the fluorescent coating and bulb wall without serious absorption. Consequently, to obtain the time-integrated value of 6500° K color temperature in the daylight fluorescent lamp, instantaneous or stroboscopic determinations will reveal, over each half cycle of the AC supply, a brief time interval which is much bluer (while the discharge is operating) and another brief time interval which is much redder (from phosphorescence while the arc is extinguished).

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THE LENGTH OF DEVELOPMENT OF THE GREATER WAX MOTH

THE larvae of the greater wax moth (*Galleria mellonella*) normally feed on the wax combs of the honey-bee. It has been found, however, that wax is not a necessary constituent of their diet, since they were reared on foods free of wax.¹ In the laboratories of the entomology division of the University of Minnesota, 35 generations of healthy wax moths have been reared on a special food used for rearing of various kinds of insects.² The temperature of the chamber was maintained at 32° C. and the relative humidity at 75 per cent. The average duration of the development (from the time the larva hatched to the time moth emerged) was equal to 29.3 ± 1.5 days (standard deviation = 3.1 days and coefficient of variation 10.7 per cent.).

The time of development given in the literature is considerably longer. Metalnikow³ gives 42–49 days; Paddock⁴ 90–120 days; Andrews⁵ 42–53 days; Chase⁶ 33–54 days; Borchert⁷ 62–64 days; Smith⁸ 56–63 days. Since the duration of development depends on temperature,^{3,5} this difference is probably due partially to the fact that the larvae were reared under different temperatures and humidity. It must be remembered, however, that when wax moth larvae are reared in large numbers in one container, they considerably increase the temperature of their surroundings.⁹ Therefore one may assume that the quality of food eaten by

the larvae influenced the most the length of their development.

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THE PEACE RESOLUTION OF SCIENTIFIC WORKERS

IN SCIENCE of May 17 (p. 478) Dr. Peyton Rous points to one isolated sentence in that resolution, "The American Scientists can best fulfill their share of this responsibility (contributions to human progress) if the United States remains at peace," and raises the question whether this is not "a conclusion based on premises yet in the making." The resolution should, obviously, be considered as a whole. Every brief statement of such complex processes as the relations of war and peace to the physical and intellectual progress of man achieved through scientific research is necessarily incomplete, partly due to the "tyranny of words." But if we assume that our colleagues who prepared and signed that resolution were and are as honest and objective as they usually are in their scientific publications, the difficulties encountered by Dr. Rous with the above sentence seem to disappear. The premises back of that sentence are not in the making. They are a matter of history. For to me, at least, the sentence does not mean that under no circumstances must our country go to war. It does mean that if and when we go to war we also in substance establish a moratorium on the method, the spirit, and the essential fruits of scientific research. I think this is a fair approximation to historic facts, particularly in the case of modern warfare.

When the resolution was transmitted to the President of the United States, it was explicitly pointed out that the statement represented the considered judgment of those who had attached their signatures. We did not pretend to speak for all American scientists. That degree of accuracy and modesty on our part Dr. Rous might have taken for granted.

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DR. ROUS's note in the May 17th issue of SCIENCE raises some questions concerning the A.A.S.W. peace statement (SCIENCE, May 3). To remove possible misunderstanding, may I point out that the statement, in seeking to emphasize the ultimate futility of war, recommends support "of all reasonable programs" which will preserve peace for the United States, but does not imply "peace at any price."

There can, I think, be little dispute that scientists, as scientists, are bound to support whatever measures are in the long run best adapted to the preservation of freedom of thought and speech. In my own opinion, recent events indicate to American scientists and to Americans generally that such measures now include

¹ *Ann. Entom. Soc. Amer.*, 29 (4): 581–588, 1936.

² *Jour. Econ. Entom.*, 29 (5): 1026, 1936.

³ *Arch. Zool. Exp. and Generale*, 4th Series, 8: 489–588, 1908.

⁴ *Texas Agr. Exp. Sta. Bul.*, No. 231, 1918.

⁵ *Trans. Wisc. Acad. Sci.*, 20: 255–261, 1921.

⁶ *Trans. Wisc. Acad. Sci.*, 20: 263–267, 1921.

⁷ *Zool. Jahre. Abt. Anat.*, 57: 105–115, 1933.

⁸ *The American Naturalist*, 70: 67–68, 1936.