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Dear Colleagues:

My attention has just been called by one of my associates to your article in the September 7th number of Science (137:765, 1962), and specifically to the abstract, in which there is the somewhat amazing statement that "Tetraethyllead is a normal constituent of vegetation growing along our highways".

I am not sure of the responsibility for the abstract, whether it is in your words or those of another, but I am sure that this is an unfortunate statement. That the determinations have indicated the presence of lead in or on the vegetation in the quantities referred to in the article is not questioned, but that there was any tetraethyllead is quite another matter. It is almost certain that there was none, since under the conditions that occur in the internal combustion engine, this compound cannot escape conversion to the inorganic state in more than traces too minute to determine analytically in the atmosphere along streets or highways.

This might be considered to be an academic point, but for the fact that there has been some concern about this very point in certain hygienic circles, and therefore, a considerable effort has been made recently by several investigators to establish the fact beyond controversy. This is my reason for calling this an unfortunate statement.

Lead is indeed a normal, i.e., physiological, constituent of vegetation, as we have demonstrated; it also occurs in and on vegetation in abnormal quantities under appropriate conditions. The term "normal" should be used with considerable care, and should usually be defined for the specific purpose of the usage employed, since, in many instances, of which this appears to be an example, the quantities are far from normal and, therefore, may have hygienic significance.

It is not my intention to be critical for the sake of criticism, but rather to call attention to the issues involved in this matter. I am not certain that any correction of this point is called for or that such action would be effective, but it seems worth while to take it into account for the future, since this matter is certain to come up again and again.

Cordially yours,

cc: Mr. Philip H. Abelson, Editor
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