

equal to 2. This means that for each enzymatically active molecule two labile phosphate radicals are present.

2) Spot II consists mainly of DPT, because the compound exerts a cocarboxylase activity and the hydrolyzable phosphorus/cocarboxylase activity ratio is practically equal to 1. This means that for each enzymatically active molecule one labile phosphate radical is present.

3) The compound present in Spot III can be identified with the MPT because, although inactive as cocarboxylase, it has a microbiological activity; it contains bound phosphate which is not split by 10 min hydrolysis; its thiochrome derivative is not soluble in isobutyl alcohol.

4) The compound present in Spot IV can be identified with thiamine because it does not contain phosphorus, is microbiologically active, and is readily soluble in isobutyl alcohol.

Researches on the presence of phosphoric poly-

esters of thiamine in other organs and on the enzymatic breakdown of these compounds will be published later.

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Comments and Communications

Plankton Terminology

THE term "ultraplankton" has been used recently (1-3) to describe the smallest known elements of the marine plankton—e.g., flagellates and green and blue-green algae, which are now generally recognized as being of primary importance as food for the majority of marine larvae (1, 4, 5). The use of this term has arisen from the need to differentiate the smaller members of the nannoplankton (or nanoplankton) from the great mass of larger flagellates, nonmotile algae, and peridinians that are too large to serve as food for the early larvae of worms, mollusks, crustaceans, etc.

To the writer the word "ultraplankton" is unacceptable, and it appears desirable to suggest an alternative before it gains general currency. "Ultraplankton" is of bastard Latin and Greek origin and, further, does not bear the meaning ascribed to it by its users. The prefix *ultra* is commonly translated as "beyond," as in ultramarine or ultraviolet, but the combination "ultraplankton" is practically meaningless. Nor is the term "ulflagellates," as used by Scottish workers (6, 7), admissible, except colloquially, since there are many nonmotile algae present in company with flagellate forms.

It is suggested that the term "hekistoplankton" should be adopted (*ἥκιστος* = "least") and should be defined as including all those elements in the plankton 10 μ or less in diameter of cell body. The limit 10 μ is suggested since the majority of larger forms cannot be ingested by marine larvae. It is in relation to their value as food for such larvae that these small elements in the plankton are principally studied; they apparently form the basis of the food chain in most marine planktonic communities.

In preparing this note I have had the benefit of advice on the choice of words of my colleague, M. N. Mistakidis, who has also drawn my attention to the

frequent use of the prefix *macro* when *megalo* would be more appropriate. I understand that in modern usage "*μακρος*" is used to describe objects that are long rather than generally bulky, for which "*μεγαλος*" is more appropriate.

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The Green Peach Aphid on Tobacco in the Dominican Republic¹

THE green peach aphid, *Myzus persicae* (Sulzer), first appeared in the United States in economically destructive numbers in 1946, in Gadsden Co., Fla. (1, 2). Ever since, its progression across the tobacco fields of the U. S. has brought forth various explanations for the phenomenon of its distribution. One explanation frequently advanced is that the development of infestations bears some correlation to the introduction of new synthetic insecticides, especially DDT, in and near the established tobacco-growing areas; it claims, in effect, that these insecticides destroy the natural predators of the aphids and that before these

¹ A contribution from a technical agricultural project in the Dominican Republic, operated jointly by the government of the republic and by the Office of Foreign Agricultural Relations, USDA. U. S. participation in this work is carried out as part of the Point IV program in the Dominican Republic, administered by the Technical Cooperation Administration, U. S. Department of State.