COMPUTATION OF FERTILIZER MIXTURES FROM EXTRA-HIGH ANALYSIS FERTILIZERS

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A number of writers have illustrated methods for computing fertilizer mixtures from materials of various sources. The fertilizer carriers used in these computations have been almost exclusively single- and double-component ones. So far as the writer knows, no mention has been made of the possibility of using the new triple-component extra high analysis fertilizers which are now appearing on the market.

Agronomists are beginning to recommend fertilizer ratios indicated by points of intersection of the decimal rulings on "the fertilizer triangle" (1, 2, 3). (Graph I.) The 24 ratios recommended by the New England and the Central State Conferences were selected in this way. It is of timely interest, therefore, to note that the ratios of but 5 of the 11 extra high analysis fertilizers on the market coincide with those indicated by the points of intersection of these decimal rulings on the triangle. Concerning this point, Baer (1) writes, "if they [these fertilizers] are to be offered directly to the consumer as they stand, then consideration may well be given to making them conform to the triangle scheme." This will be especially advisable, as those recommending fertilizer ratios come more and more to limit themselves to ratios indicated by the points of intersection in the decimal scheme, and as farmers come to realize more and more the saving in freight, hauling, and spreading when the high analysis mixtures are used.

Doubtless, applications of these extra high analysis fertilizers will be restricted largely to truck crops until machines come into general use which are capable of spreading quantities small enough for field crops. Nevertheless, there may actually develop two new forms of home mixing—one of using these fertilizers as a base to mix with non-fertilizing materials, such as soil or limestone, to secure the greater bulk needed for spreading on general crop land; and another

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3Samples of 11 of these fertilizers have been received thus far, viz., 15-30-15, 16.5-16.5-20, 15.5-15.5-19, 15-11-26.5 (Synthetic Nitrogen Corporation); 12-24-12, 10-20-15, 10-30-10 (American Cyanamid Company); 9-27-9, 9-18-18 (Armour and Company); and 4-16-10, 8-16-14 (York Chemical Works). These figures refer to percentages of N (or NH₃), P₂O₅, and K₂O, respectively.

4Reference by number is to "Literature Cited," p. 738.