Preparation and Use of Composts, Night Soil, Green Manures, and Unusual Fertilizing Materials in Japan
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Farm manures have always been of great importance in the fertilizer program of the Japanese farmer. High costs of commercial fertilizers and the generally small income of the average Japanese farmer have often limited his ability to purchase the fertilizer which he could have used to advantage for growing crops. The Japanese farmer, therefore, has been compelled to depend to a great extent on home-produced manures to supplement those purchased. Relatively large quantities of fertilizers are required to maintain the intensive type of agriculture practiced in Japan (3,5,6,7,8).

Although Japan apparently does make maximum use of farm manures, she has supplemented them heavily with commercial fertilizers in order to maintain a reasonable level of crop production. In comparison with the average amounts of commercial fertilizers consumed by the major agricultural countries of the world during 1935-37, in terms of pounds per acre to total arable land, Japan was third in the total amount of nitrogen (37.4 pounds), fifth in phosphoric acid (34.4 pounds), and fifth in the total amount of potash (15.1 pounds) consumed. Yet Japan ranked 19th in the world distribution of arable lands. During World War II farm manures became more important in the fertilizer program of the Japanese farmer. Before the outbreak of hostilities and the subsequent sinking of Japanese shipping and blockade of Japanese ports, consumption of commercial inorganic fertilizers reached an all-time high in Japan, farm manures supplied approximately one half the nitrogen and phosphorus used on the farms in Japan during that year. In 1945, 86% of the total nitrogen consumed was supplied by farm manures in one form or another. In 1946 production of farm manures decreased slightly and supplied an estimated 81% of all nitrogen consumed.

Before the outbreak of war in 1941, about one-third of all the phosphorus applied to the soil came from farm manures. With the outbreak of hostilities and consequent sinking of Japanese shipping and blockade of Japanese ports, consumption of commercial phosphatic fertilizers was reduced so drastically that in 1945 farm manures supplied about 96% of the phosphorus used on the farms in Japan during that year. In 1946, it is estimated that 93% of the phosphorus was supplied from farm manures.

Farm manures have always been major sources of potassium for Japanese farmers. Even during World War II about 80% of the potassium used came from farm manures. In 1945 production of potassium (99.5%) was supplied by farm manures. It is estimated that in 1946 farm manures supplied 96% of the total potassium consumed.