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Edamame production practices for small-scale farms in China

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China is the largest production, consumption and export country of vegetable soybean (Edamame) in the world. The average annual sowing acreage is 150,000 ha with average yield of 5 t/ha. China's export of frozen vegetable soybeans accounted for over half of the world's total frozen vegetable soybean export. Majority of edamame production is produced in Southern China by small-scale farms, though interests in planting Edamame are increased in North and Northeastern areas. Edamame are planted from February to August in Southern China, where varieties are divided into spring and summer/fall Edamame based on planting dates. Spring Edamame are usually intercropped with wheat, cotton and spring corn, while summer/fall Edamame are intercropped with cotton, corn, peanut, sweet potato or other vegetables and fruits (grapevine). Edamame cultivation in the footpath of rice field (levee/rand cultivation) was the traditional way of Edamame cultivation in Southern China. Now footpath cultivation is less, because of herbicide application and fewer labor. Edamame rotated with fresh corn and Chinese cabbage is the common practice in North China, while it is commonly produced with row spacing of 67 cm wide in Northeast China.

Key pointers for Edamame cultivation are: (1) planting Edamame seeds when soil temperature at 5-cm soil depth is stabilized around 8°C; (2) Transplanting seedlings to field when simple primary leaves are fully expanded; (3) Planting seeds at soil depth of 3-cm or less is preferred for even emergence; (4) Potassium sulfate 120 kg/ha at seeding with 150 kg/ha diammonium phosphate and 50 kg/ha urea at seeding and foliar spray of 4.5 kg/ha potassium after flowering is strongly recommended for Edamame production.