Improving Tomato Productivity in Cambodia

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Abstract

The maximum temperature in Cambodia is approximately 370C and will be increase every year. This climate change makes Cambodian farmers cannot produce tomato during the entire year, resulting in low tomato market supply and require import from neighboring country. A big challenge in tomato production for Cambodia farmer is the high temperature. This research aims at investigating the agronomic performance, disease susceptibility, yield, and fruit quality of indeterminate tomato cultivars in high temperature conditions of Cambodia. The goal of this study is to select suitable tomato cultivars for the use in the production in Cambodia. This research will be conducted by using a diversity of 20 indeterminate tomato cultivars at two locations in the difference micro-climate condition. The experiment will be laid out on randomized complete block design with five replications. The experiment will be conducted at the Royal University of Agriculture and in partnership with the technology park of the Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN) in Siem Reap province. A technology park of CE SAIN already exists in Siem reap province and a greenhouse is available at RUA to conduct the experiment. Data on agronomic performance, disease susceptibility, yield, and fruit quality will be collected. The data set analyzed in Statistxe program, version 8.0. It is expect to identify potential tomato cultivars which are tolerant to high temperature, provide high yield and high fruit quality to be recommended for production in Cambodia.