

Bio fertilizers colonize the root zone, which enhances the absorption of nutrients and increases crop productivity, which in turn produces safe and secure foods. It is a low-cost source of nutrients, a way to combat negative effects, a safe alternative to chemical fertilizers, and reduces ecosystem change to a large extent. Because the long-term effects of using chemical fertilizers reduce soil fertility, lead to the production of crops susceptible to diseases, and weaken plant roots. Therefore, the world certainly needs to encourage agricultural productivity in a sustainable and environmentally friendly way by using bacterial bio fertilizers to increase the proportion of plant elements such as fixing atmospheric nitrogen, increasing phosphorus, potassium, and many other components such as increasing protein contents essential amino acids and vitamins, increasing the percentage of leaves and fruits, fruit size and plant length, and reducing the risk and diseases caused by chemical fertilizers. Therefore, the project aims to produce biological preparations (biofertilizers) suitable for inoculating plants grown in the study area, while paying attention to the microbes that live inside plant tissues for vegetable crops in the region.