World Academy of Science, Engineering and Technology International Journal of Energy and Environmental Engineering Vol:19, No:11, 2025

The Impact of Climate Change on the Spread of Potato Pests in Kazakhstan

Authors: R. Zh. Abdukerim, D. A. Absatarova, A. T. Aitbayeva, M. A. Askarova, S. T. Turuspekova, E. V. Zhunus

Abstract : The resilience of agricultural systems at the global level to climate change and their ability to recover determines the prospects for food security on a global scale. Since climate change will lead to changes in temperatures, precipitation, weather conditions and mass outbreaks of harmful organisms. The issue of adaptation to climate change in the agricultural sector is one of the priorities of Kazakhstan's Development Strategy for the period up to 2050. Since Kazakhstan is an agroindustrial country in which agriculture plays an important economic role. Kazakhstan is the largest potato producer in Central Asia, accounting for about 60% of the total vegetable production, which determines the urgency of solving the problem of increasing yields and quality. The control harmful organisms plays an important role in solving this issue. Due to the fact that climate change can lead to an increase in the number of harmful organisms and, accordingly, to a complete loss of harvest.

Keywords: potato pests, Colorado potato beetle, soil pests, global climate change

Conference Title: ICCA 2025: International Conference on Climate Change and Agroecology

Conference Location: Istanbul, Türkiye Conference Dates: November 08-09, 2025