

# **Cold Temperature Damage at Rice Ear Stage and Disaster Mitigation Measures in Taitung Rift Valley Area**

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## **Abstract**

In Taitung Rift Valley rice earing stage cold temperature damage occurred in 2009, 2013, 2014 and 2020. The number of cold temperature damage and the proportion of cold damage area increased with latitude from south to north. Except in 2013, early planting of rice seedlings were the cause of the cold damage of rice. The long-term observation data of Taitung Rift Valley Meteorological Station showed from 15th March to 25th April, the last occurrence date of the average daily temperature lower than 18°C would be delayed from south to north with latitude. The frequency of occurrence increased with increasing latitude, comparison of daily average temperature in the 11 years former (2000 to 2010) and latter (2011 to 2021). The last occurrence date of the average daily temperature below 18°C was earlier. Evaluate the seedling transplanting time according to the occurrence of low temperature natural disasters, Taitung City at early January, Beinan Township from mid to late February, Luye Township from late January to late February, Guanshan Town should be at mid-February, and Chishang Township from mid to late February.