

# 琉球大学学術リポジトリ

[記事](研究発表会要旨)Physiological and Ecological Studies on Control of Perennial Weed *Panicum repens* L. : 1.Effect of Three Different Types of Okinawan Soil on Growth of Torpedograss (*Panicum repens* L.)

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第11回研究発表会 講演要旨

**1. Physiological and Ecological Studies on Control of Perennial**

Weed *Panicum repens* L.

1. Effect of Three Different Types of Okinawan Soil on Growth of  
Torpedograss (*Panicum repens* L.)

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**Objective:**

To determine the effect of three different types of soil on growth of Torpedograss (*Panicum repens* L.).

**Materials and Methods:**

Grey soil, Reddish soil and Red soil were used in this experiment and each was replicated 15 times. Five single noded rhizome cuttings were planted in wagner pot of 1/2000a. First, data were subjected to the germination test. Next, one weed in each pot was allowed to grow and remaining were pulled out for following growth test. No fertilizers and chemicals were used for maintaining the purity of soils.

**Results and discussion:**

The earliest and the highest bud germination of 42.6% was obtained from the Red soil followed by Reddish soil of 33.3%, while late and the lowest of 25.3% bud germination was obtained from the Grey soil. The earliest tillering, the highest weed population, growth of rhizome and the significantly highest dry weight of shoot and root were obtained from the Grey soil followed by Reddish soil. On the other hand, a complete adverse root-shoot ratio was recorded from the study. The total growth and the dry weight production of weed were the highest in the Grey soil and the lowest in Red soil. This growth and production of weed were affected due to the physiological and chemical properties of different soils.