

ชื่อเรื่อง

A Study on the Ecotype Comparison of Vetiver Grass in Thailand

ชื่อผู้วิจัย

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Abstract

The vetiver grass of 28 different ecotypes were collected from the brackish water coastal areas in the southern to high mountains in northern parts of the country. These vetiver grass were identified as 17 ecotypes of *Vetiveria nemoralis* A. Camus (upland species) and 11 ecotypes of *Vetiveria zizanioides* Nash (a wetland species, 1 ecotype was introduced from Sri Lanka). These vetiver grass were used as plant materials in the experiments of 12 different locations that were conducted to test the vetiver grass characteristics suitable for hedge development in sandy, loamy-clay and lateritic soils. The growth of vetiver grass considered were tillering, clump diameter and height at the age of 90 days after planting which started from July 27, 1992 to October 27, 1992.

The experiment results showed that high growth of vetiver grass were obtained from 10 ecotypes, these were 6 ecotypes of *V. nemoralis* and 4 ecotypes of *V. zizanioides*. *V. nemoralis* appeared to have an average more tillering than that of *V. zizanioides*. 30 tillers per clump and 18 tillers per clump respectively. Nevertheless the average of clump diameters were not different, the was 12 centimetres. An average height, of *V. zizanioides* was higher than that of *V. nemoralis*, 104 centimetres and 99 centimetres respectively.

The ecotypes suitable for hedge development in sandy soil were 4 ecotypes of *V. nemoralis*, Nakhon-Sawan (v7), Kampaengpet, 1 (v8), Roi-Et (v13), Rachburi (v20) and 2 ecotypes of *V. zizanioides*, Kampaengpet 2 (v9), Songkhla 3 (v28).

The ecotypes suitable for hedge development in loamy clay soils were 5 ecotypes of *V. nemoralis*, Loei (v6), Nakhon-Sawan (v7), Kampaengpet 1 (v8), Rachburi (v20), Prajuabkirikhan (v22) and 2 ecotypes of *V. zizanioides*, Suratani (v23), Songkhla 3 (v28).

The ecotypes suitable for hedge development in lateritic soils were 2 ecotypes of *V. nemoralis*, Loei (v6), Prajuabkirikhan (v22) and 4 ecotypes of *V. zizanioides*, Sri Lanka (v4), Kampaengpet 2 (v9), Suratani (v23), Songkhla 3 (v28).