

Breeding of the newly variety of nilegrass “NL cv. TS2”⁽¹⁾

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Abstract

There are 10 lines of *Acroceras macrum* Stapf genetic resources, AC14, AC15, AC20, AC22, AC26, AC29, AC30, AC33, AC36 and AC39 to be introduced from Africa as parents. Through natural self-pollination and individual observation, 11 breeding lines with good characteristic are selected to be investigated in preliminary yield trials, advanced yield trials and quality analysis. The dry matter yield 5.30 ton/ha/cut of breeding line A11 is the highest and then 4.91 ton/ha/cut of A10 is the next. The dry forage yields of both A11 and A10 are much higher than 4.27 ton/ha/cut of control group “NL cv. TS1.” Although the stem diameter 2.04 mm of A10 is smaller than other lines, its leaf length 18.1 cm, leaf width 0.75 cm and leaf/stem ratio 0.67 are higher than the control groups and also the leaf number 1,035/m² of A10 is the most. The content of crude protein (CP) of A10 is about 9.2-10.7%, average acid detergent fiber (ADF) 36.4% and neutral detergent fiber (NDF) 64.5%. A10 is highly productive and has good quality with great adaptability in all regions.

Key words: Nilegrass, NL cv.TS2, New variety.

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