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罗顿豆与3种多年生禾本科牧草的混播

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摘要:在湘南红壤丘陵区以南非马唐(Digitaria smutsii)、索兰德狗尾草(Sorander bristlegrass)、扁穗牛鞭草 (Hemarthria compressa)分别与罗顿豆(Lotononis bainesii)进行混播试验,以探明其最佳混播组合及其混播比率与 混播方式。结果表明:本试验中,隔1行罗顿豆种2行南非马唐处理和隔2行罗顿豆种1行南非马唐处理是产草总 量潜力较高的栽种模式,散栽 50%罗顿豆和撒播 50%索兰德狗尾草处理是粗蛋白产量潜力最高的栽种模式;罗顿 豆与3种多年生禾本科牧草混播,相同处理下不同禾本科牧草总产量和粗蛋白产量差异明显,当罗顿豆和禾本科 牧草用量各为正常用量的 50%时,同一禾本科牧草条播与撒播处理对产草总量无显著影响;与禾本科牧草单播相 比,次年相应混播处理均能提高牧草总产量和粗蛋白产量。

关键词:湘南红壤丘陵区:罗顿豆;禾本科牧草:混播;产量

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Study on Lotononis bainesii Mixed Sowing Respectively with Three Kinds of Perennial Forage Grasses

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Abstract: In order to study the best mixed sowing combination and mixed sowing ratio and mode, the experiment of Lotononis bainesii mixed sowing respectively with Digitaria smutsii, Sorander bristlegrass and Hemarthria compressa had been carried out in red soil hilly region of southern Hunan. Results show that the treatment of strip planting one line of Lotononis bainesii every two lines of Digitaria smutsii and the treatment of strip planting two lines of Lotononis bainesii every one line of Digitaria smutsii produce higher forage yield potential mode. The treatment of 50% Lotononis bainesii planted with scatter sowing 50% Sorander bristlegrass produces the highest crude protein yield potential mode. When Lotononis bainesii mixed sowing with three kinds of perennial forage grasses, total forage yield and crude protein have significant differences under the same cultivation mode. Total forage yield shows no significant difference between strip sowing and scatter sowing when the sowing amounts of both Lotononis bainesii and forage grass are the half of normal sowing amounts. Compared with forage grass separate sowing, total forage yield and crude protein are improved by mixed sowing under the corresponding treatments in the next year. Key words: Red soil hilly region of southern Hunan; Lotononis bainesii; Forage grass; Mixed sowing; Yield

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