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EVALUATION OF TOBACCO VARIETIES FOR THE GALEWELA REGION IN THE YALA SEASON


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The major variety of Flue Cured Tobacco (*Nicotiana tabacum* L.) cultivated in Sri Lanka at present is K 326. With the introduction of new tobacco varieties, there is a significant potential to increase the genetic diversity and productivity and thereby focus on future benefits to the tobacco industry of Sri Lanka. Therefore, this study was carried out from July to December in 2013 to evaluate qualitative and quantitative parameters of three new tobacco varieties, namely LK 01, OD 86, and LK 08 imported from the Republic of South Africa (RSA) with the presently cultivated K 326 in the Galewela region. All lines were grown in adjacent fields having the same soil types in a Randomized Complete Block Design (RCBD) with eight replicates. Each plot consisted of 2000 plants and data were collected from sub plots containing 200 plants. Survival rate (%), disease resistance (%), days to topping, leaf area expansion stabilization (days), yield (kg/ha), conversion values (%), flavor grade turn out (GTO) -1F (%), gross income (Rs. /ha) and leaf nicotine content (%) were evaluated. There was no difference among lines for survival and disease resistance. The variety OD 86 had the highest productivity and the highest income under field conditions with better vegetative growth. Hence farmers are more benefited financially by cultivating the variety OD 86 in the Galewela region. Farmer acceptance of the variety OD 86 was higher than all other selected tobacco varieties. The highest flavor grade of tobacco was produced by the variety LK 01, so that further qualitative improvements of tobacco can be done by cultivating this variety. The lowest qualitative and quantitative performance was observed in the variety LK 08. Overall, the variety OD 86 was the best performing variety in terms of productivity and income, while the variety LK 01 was the best for flavored tobacco under the field conditions in the Galewela region during *Yala* season.