

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

SCREENING FORAGE PEANUT GENOTYPES FOR SPEED OF ESTABLISHMENT IN PURE STANDS

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Brazil is the center of origin of forage peanut (*Arachis pintoi*), the most important forage legume for use in mixed pastures in equatorial climates. Its main attributes are the high forage quality, grazing tolerance and persistence. Slow establishment is an important drawback of forage peanut as a pasture legume. The present study screened 12 forage peanut genotypes for speed of establishment in pure stands. Stolon pieces were planted into 128-cell trays filled with commercial substrate and kept irrigated twice daily for three weeks in a nursery. In October 2017, 32 rooted stolons were transplanted to 2 x 2 m field plots with four replicates of a randomized complete block design. Soil was limed and fertilized according to soil analysis. During establishment, plots were evaluated from 36 to 95 days after transplanting (DAT) by measuring plant height, canopy cover, flowering, plant vigor and intensity of disease symptoms. Data were submitted to analysis of variance with means grouped by the Scott-Knott test. Average canopy cover was 28.3% at 36 DAT and increased to 62.3% at 50 DAT and 96.9% at 76 DAT. Accessions V13196 and BRA-042242 showed the faster establishment ($P < 0.05$), with canopy cover of 86.3% at 50 DAT. All genotypes presented complete canopy cover at 95 DAT. At this time, cultivar BRS Mandobi presented the taller plants with 19.8 cm ($P < 0.05$). Cultivar Amarillo, hybrid V1(59) and accessions V13196, BRA-042242 and V14950 constituted a group with intermediate plant height (12.9 to 15.3 cm). Cultivar Belmonte integrated the group with shorter plants (9.0 to 11.6 cm). Cultivar Amarillo and accession Vi301 presented the higher flowering intensity (50% to 80% of plants) as opposed to cultivar Belmonte and accession BRA-042242 that formed the group with lower flowering intensity (less than 20% of plants). Cultivar Amarillo and accessions V13211, V14951 and Vi301 were the less vigorous genotypes. Main disease symptoms observed were indicative of viruses. Accession Vi301 were the most attacked ($P < 0.05$), followed by cultivar Amarillo and accession V13211. Cultivars Belmonte and BRS Mandobi, hybrid V1(59) and accession V13196 showed few disease symptoms. Accessions V13196 and BRA-042242 were selected with superior speed of establishment, plant vigor and low incidence of diseases.

Keywords: *Arachis pintoi*, diseases, mixed pastures, pasture legumes

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