Short-Duration Pigeonpea-A Potential Grain and Forage for Southern Plains. (C06-rao104920-Poster)

Authors:

- S.C.Rao USDA-ARS
- W.A.Phillips USDA-ARS
- H.S.Mayeux USDA-ARS

Abstract:

Forage based livestock production systems occur extensively throughout the southern Great Plains (SPG). However, a period of limited forage availability occurs from late July to early November in the region. In semi-arid regions of Asia, pigeonpea (Cajanus cajan L. Millsp) is grown for grain and as a summer forage crop. Little information is available concerning the use and management of pigeonpea in the SPG. A 3 -year (1996 to 1998) field study was conducted to determine forage production patterns and grain yield and nutritive value of two short-duration pigeonpea ecotypes, Georgia-2 and ICPL 85010. Total biomass at final harvest in October was 12.6, 6.4, and 9.3 Mg/ha in 1996, 1997 and 1998, respectively. Seed yield also varied with year, ranging from 5.4 Mg/ha in 1996 to 1.2 Mg/ha in 1998. Nitrogen concentration and digestible drymatter at final harvest was 19 and 585 g/kg for whole plant, 34 and 758 g/kg for leaves, 9 and 420 g/kg for stems and 26 and 750 g/kg for seed, respectively. Short-duration pigeonpea cultivars evaluated in this study provided high quality forage and grain that could be used to fill the latesummer forage deficit period in forage-based livestock production system.

Corresponding Author Information:

Srinivas Rao USDA-ARS 7207 W. Cheyenne St. El Reno, OK 73036

phone: 405-262-5291 fax: 405-262-0133 e-mail: srao@grl.ars.usda.gov

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