## Water, Food, Energy & Innovation for a Sustainable World

ASA, CSSA, & SSSA International Annual Meetings Nov. 3-6, 2013 | Tampa, Florida

American Society of Agronomy | Crop Science Society of America | Soil Science Society of America

Start

Browse by Section/Division of Interest

**Author Index** 

245-14 Total and Monthly Yields of Forage Oat Cultivars in Different Locations in the South and Southeast of Brazil.

## **Poster Number 611**

See more from this Division: C06 Forage and Grazinglands See more from this Session: General Forage and Grazinglands: II

Tuesday, November 5, 2013 Tampa Convention Center, East Hall

Felipe Tonato<sup>1</sup>, Aleksander Westphal Muniz<sup>2</sup>, José Lino Rosa<sup>3</sup>, Jeferson Flaresso<sup>3</sup> and Rodolfo Godoy<sup>4</sup>, (1)Brazilian Agricultural Research Corporation (EMBRAPA), Manaus, Brazil (2)Brazilian Agricultural Research Corporation, Manaus, Brazil

(3)Epagri, Lages, Brazil

(4)Brazilian Agricultural Research Corporation, São Carlos, Brazil

In the South and Southeast of Brazil, most of the cropland used in the spring/summer, sit idle in the autumn/winter, due to unfavorable climatic factors and high production risk for major crops. An alternative to include these areas in the production process, it is their conversion to animal production in this period, with the cultivation of winter forage for grazing or forage conservation. Under this approach, oats are configured in one of the most viable alternatives. The objective of this study was to evaluate the total and monthly yield of black (Avena strigosa Schreb.) and white (Avena sativa L.) oat cultivars in South and Southeast of Brazil, in order to identify the materials with the greatest potential and better production profile for each location. The experimental design was a randomized block with four replications. Cultivars IAPAR 61 (black), IPR 126 and FAPA2 (white) were evaluated under cutting in the autumn/winter periodsbetween 2004 and 2007 in São Carlos (São Paulo), Ituporanga and Lages (Santa Catarina), Southeast and South of Brazil respectively. Over the four years of evaluation, cultivars showed similar productivity in each locality. Productivity between locations varied, with São Carlos producing on average 6.6 Mg DM ha-1, tuporanga 4.3 Mg DM ha-1 and Lages 2.9 Mg DM ha-1 in the five months of cultivation. The difference in productivity between São Carlos and Ituporanga is probably due to higher average temperatures at this time of year in the Southeast, since the soil fertility in the two locations is similar. The lowest yield of Lages over Ituporanga, places with similar climate, probably due to the lower fertility of soils characteristic of Lages. Seasonal yield was different among black and white oat cultivars. Black oats yielded 25% of the total in May, whereas white oat yielded 29%. During June black oats yielded 27% and white oats kept 29%. July was the month when white oats started to decrease their production yielding an average of 25%, the same proportion of the black oat. In August the production decline for all the oats with white oats producing an average of 17% and black oat 23%. Any of the evaluated cultivars can be recommended for forage use, since all showed similar yield and seasonal distribution at each location.

See more from this Division: C06 Forage and Grazinglands See more from this Session: General Forage and Grazinglands: II

<< Previous Abstract | Next Abstract >>

© Copyright 2013 - Copyright Information, Privacy Statement, and Terms of Use American Society of Agronomy | Crop Science Society of America | Soil Science Society of America 5585 Guilford Road | Madison, WI 53711-5801 | 608-273-8080 | Fax 608-273-2021 Certification 608-273-8085 | Fax 608-273-2081