

herbicidas nas doses estudadas. A utilização dos herbicidas Roundup e Direct proporcionou a oferta de uma forragem de alta qualidade por assegurar a permanência das leguminosas perenes de inverno e a implantação da *P. plantaginea* e do *P. americanum*.

USE OF HERBICIDES ROUNDUP AND DIRECT ON THE ESTABLISHMENT OF *Pennisetum americanum* cv comum BY DIRECT TILLAGE AND OF *Brachiaria plantaginea* NATURALLY SEEDDED ON A WINTER PASTURE.

An experiment was conducted at the field of UFRP, Curitiba, Paraná, Brazil, to evaluate the establishment of *Pennisetum americanum* cv comum by direct tillage and of *Brachiaria plantaginea* naturally seeded on a winter pasture. Herbicide treatments were glyphosate (Roundup)(360; 720; 1080; 1440 and 2160 g ai ha⁻¹), glyphosate (Direct)(1080; 1440 and 2160 g ai ha⁻¹) and 2,4-D+picloram (Tordon 2,4-D 64/240) (720 and 192 g ae ha⁻¹ of 2,4D amina and Picloram respectively) compared to a non-treated check. A complete randomized design with four replicates was used and means were compared by Duncan 5%. Evaluation was done using BOTANAL method, using 5 observers which evaluated 2 samples per plot. Thirty d after sowing, percent participation of the different vegetation components in the production of accumulated dry matter was evaluated. *Lolium multiflorum* cv comum was favored at the end of its cycle by Tordon (17,5%) when compared to the check (5,5%), and was eliminated in the rest of the treatments. *Trifolium pratense* cv quinequeli was not different from the check when treated with Roundup or Direct, sensible to increases in doses, varying from 10.7% to 0.5% and being totally eliminated by Tordon. *Trifolium repens* cv jaqué varied from 28.7% to 2.5%, favored by smallest doses of Roundup and Direct which differed significantly from the check, also being sensibly affected by Tordon. *Lotus corniculatus* cv San Gabriel varied from 15.2% to 0.5%, major contribution to the survival of the species was given by doses of Roundup 720. Grasses as *B. plantaginea* and *Digitaria horizontalis* were favored by the use of herbicides varying from 42% to 4.2% in the check. *P. americanum* oscillated from 17.2% to 6.7%, tending to a better participation in treatments with herbicides. Presence of dicotiledons varied from 43% in the check to 2.7% when treated with Direct 1080 g ai ha⁻¹, being effectively controlled by all the herbicides and doses studied. The use of Roundup and Direct offered high quality forage because they assured permanence of winter perennial legumes and the implantation of *B. plantaginea* and *P. americanum*.

132 - EFEITO RESIDUAL DE HERBICIDAS DA CULTURA DA SOJA SOBRE O MILHO SAFRINHA. I. HERBICIDAS DE PRÉ-EMERGÊNCIA. J.B. da Silva, D. Karam, J.M. Guissem e E.R. Archângelo. EMBRAPA/CNPMS, Cx P 151-35701-970, Sete Lagoas, MG-Brasil.

Com o objetivo de avaliar-se o efeito residual de herbicidas de pré-plantio e pré-emergência usados na cultura da soja sobre a cultura do milho safrinha, foi instalado um ensaio de campo na base física do Centro Nacional de Pesquisas de Milho e Sorgo, Sete Lagoas, MG, no ano agrícola 1993/94. A cultivar de soja Garimpo, foi semeada em 04/11/93 em um Latossol Vermelho-amarelo, de textura argilosa pesada, contendo 2.5 % de matéria orgânica. As parcelas experimentais mediam 3.6 m de largura * 12.0 m de comprimento e foram dispostas no delineamento de blocos ao acaso, com doze tratamentos e seis repetições. Foram avaliados em pré-plantio-incorporado (PPI) os herbicidas imazaquin (150 g ha⁻¹) e trifluralin 480 (864 g ha⁻¹) e, em pré-emergência (PRE), os herbicidas imazaquin (75 e 150 g ha⁻¹), pendimethalin (1000 e 1500 g ha⁻¹), trifluralin 600 (1800 e 2400 g ha⁻¹), clomazone (800 e 1000 g ha⁻¹) e metolachlor + metribuzin (2520 + 360 g ha⁻¹). Os tratamentos de PPI foram aplicados em 03/11/93 com o solo na capacidade de campo e os tratamentos de PRE foram pulverizados em 06/11/93 sobre solo seco na superfície. A cultivar de milho BR 201, foi semeada em 28/03/94, sete d após a colheita da soja e 142 d após a aplicação PRE. A altura de plantas, volume de raiz e matéria seca de parte aérea e raiz do milho, medidos aos 15, 22, 29 e 36 d após a emergência, assim como os parâmetros de rendimento, não foram influenciados pelos efeitos residuais dos herbicidas de pré-emergência utilizados na cultura de soja.

RESIDUAL EFFECT OF HERBICIDES ON A SOYBEAN CROP SOWN OVER MAIZE SAFRINHA. I. PRE-EMERGENCE HERBICIDES.

An experiment was conducted to evaluate residual effect of prior to planting and pre-emergence herbicides on a soybean crop sown over safrinha maize. The trial was setup in 1993/94, on a field of the National