ABSTRACT

A field experiment was conducted at Dry Farming Research Station, Targhadia (Gujarat) during Kharif 1997-2002 to study the effect of crop residue recycling through organic mulches and their decomposition with varying levels of nitrogen on soil and crop productivity in groundnut-pearl millet sequence under dry farming condition. It was noticed from results that mulching of farm waste found better for maintaining status of organic carbon, available nitrogen and potash while, wheat straw and groundnut shell found superior in case of available phosphorus and sulphur, respectively. Groundnut shell was found superior among various mulches in respect to physical parameters of soil.

Key words: Crop sequence, Crop residue mulch, Soil productivity