The yield losses caused due to weeds within India are the extent of 37 per cent while insects and diseases account for approximately 22 per cent and 29 per cent, respectively. Today diversity in weed management programme must be integrated and balanced to avoid unsustainable dependence on only one or two tools for example the intensive, expensive and erratic application of herbicides leads to their accumulation in soils to a dangerous level that adversely affects both the quality and biological composition of soils (Srinivas et al., 2008; Zahran, 1999). Such type of programme will includes different cultural, mechanical and agronomic practices including minimizing weed seed production and management of soil weed seed bank. In light of above, this experiment was conducted to study the effect of maize based cropping systems on weed dynamics and crop productivity.

**RESEARCH PROCEDURE**

The experiment was conducted during *Kharif* and *Rabi* 2010 in split plot design with three replications. The main plot comprised of five different maize based cropping systems viz., maize - wheat, maize- chikpea, maize – *Rabi* sorghum, maize-safflower and maize – pea while in subplots recommended practice i.e. 2HW, 1 H at 3 and 6 WAS weedy check treatments were included. The gross and net plot size were 4.5 x 4.5 m and 3.6 x 3.6 m, respectively during both seasons. The spacing maintained during *Kharif* season for maize was 60x30 cm while during *Rabi* season it was 22.5cm for wheat and was 45 x 15 for chickpea, *Rabi* sorghum, safflower and pea. The recommended dose of NPK and plant protection schedule was followed during both the seasons for respective crops. During *Kharif* 2010 the maize crop was sown on 28.06.2010 and *Rabi* crops were sown on 26.10.2010.