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Abstract: Rose (*Rosa* spp) is a universally celebrated flower. It belongs to the family Rosaceae, which contains more than 150 species and 1400 cultivars (Gault and Synge, 1971; Elgimabi, 2011). It ranks first in global cut flower trade. In India cultivation on commercial scale for cut flower is a recent development. In India, according to a recent survey about 4330 ha. area, producing 874 million stems valued at Rs.44.00 crores, is under rose cultivation in the states of Tamil Nadu, Karnataka, Maharashtra and West Bengal (www.nabard.org). In India, it is mostly cultivated under open field conditions. In Jharkhand, floriculture is an emerging sector, there are five commercial flowers grown under open field condition, like Rose, Gladiolus, Marigold, gerbera and Chrysanthemum. They are grown under the area of 1.6 thousand ha (NHB database 2012) and contributes 2-3% of the total production of the country (NHB database 2012).The climatic condition for Rose is favourable here; winter is the main season for this crop. It has been seen that during December to Mid January the minimum temperature goes below 70C which affect the production. On the other hand, due to acidic, sandy loam soil, weeds are one of the serious problem in this region, reduce the yield of about 30-45% (Singh and Singh, 2004), it also affect its yield and deteriorate the quantity and quality of flowers. As well as, Heavy manurial and irrigation requirement of this crop increase conditions conducive, for the growth of numerous monocot and dicot weeds. These weeds compete with crop for various factors such as nutrient, moisture, light and space. Manual weed control is effective if done frequently, but it is very expensive, time consuming and laborious and if not done properly it damages the whole root system. As we know, that Mulching is one of the cultural practices which can increase the soil temperature, moisture, keeps the growth of weeds considerably down, besides improving chemical and physical properties of soil. To overcome these problems, one experiment has been planned to see the effect of mulching on rose cv. Mainu Parle was conducted during October – March, 2011-12. The experiment consisted of nine treatments of (50, 100, 200 micron) thickness black polythene and white polythene along with paddy straw and control (hand weeding and no weeding). The experiment was laid out in randomized block design with three replications. On the basis of observations, The weed count/m² and dry weight of weeds were significantly minimum in Black Polythene 200 micron (5.66/m² and 1.93 g/m²) respectively whereas maximum count and dry weight was found in white polythene 50 micron (451.27 g/m² and 325 g/m²) respectively whereas in check it was noted about (347.57/m² and 207.8 g/m²) respectively (Singh and Karki, 2000) Among the vegetative characters. The days to flowering was found minimum in white polythene whereas the duration of flowering was found maximum in black polythene 200 micron which was at par with black polythene 100 micron. Among the reproductive characters, the maximum number of shoots (11.47), number of flowers (47.00 flowers/plant) (Singh and Kamal, 2012) which was at par with black polythene 100 micron whereas minimum was observed in weedy control (15.60). The flower diameter was also observed maximum (12.33 cm) in black polythene 200 micron. Under normal conditions, cut roses last only for a few days maintaining their beauty and attractiveness. However, most of the people like to enjoy them in their natural beauty and appearances for a longer period of time having the socio-economic value of flowers intact (Tsegaw et al., 2011; Zamani et al., 2011). So another experiment has been planned to see the effect of different solutions to vase life of rose. Thus using appropriate preservatives could help to extend the vase life of the harvested produce for consumer's satisfaction and exploitation of business. The experiments conducted in CRD, consisted of eight treatments, with different holding solution of Bleaching powder, Sucrose, Al₂So₄(300ppm), Brine solution, GA₃, Sodium benzoate and distilled water. On the basis of observation, vase life and floral diameter of Rose was found maximum (6.56 days and 6.46 cm) respectively in the treatment of Sucrose (4%) + Al₂So₄(300ppm) (Kumar and Kumar 2010). The bacterial count was found to be minimum in treatment combination of Sucrose (4%) + Al₂So₄ (300ppm).

Description: EFFECT OF MULCHING AND POST HARVEST MANAGEMENT IN ROSE (*Rosa hybrida*)

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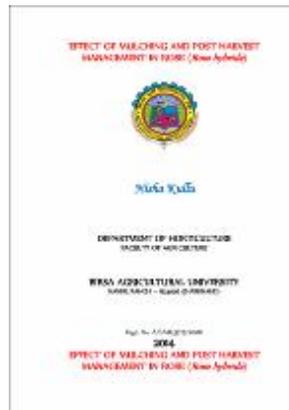
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