EFFECT OF SHADING, FREQUENCY OF IRRIGATION AND FERTILIZER APPLICATION ON GROWTH AND BULB YIELD OF ONION (ALLIUM CEPA) IN THE NORTH-WESTERN REGOSOL BELT OF SRI LANKA.

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A replicated experiment was conducted at the Agricultural Research Station, at Kalpitiya in the North Western Dry Zone of Sri Lanka during 1986 Yala season (May - Sept.); to study the effect of shading, frequency of irrigation and fertilizer application on growth and bulb yield of Red onion. Ipil Ipil (Leuceana leucocephala) planted to avenues of 1m and 2m were used to shade onion and this reduced the bulb yield by 53% and 50% and average bulb weight by 52% and 46% respectively, while plant height at six weeks, after planting increased by 28% and 16% respectively. Daily irrigation significantly increased the plant height and total bulb yield compared to irrigating once in two days and three days. Frequent irrigation also significantly improved the number of bulbs per plant and everage bulb weight. However, a significant influence on plant height, number of bulbs, average bulb weight and total bulb yield was not observed in the treatments with more frequent fertilizer application (Basal + five top dressings) compared to less frequent application. (Basal + one top dressing).