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EFFECT OF LIGHT REFRACTIVE OR TRANSMITIVE CUM REFLECTIVE CHROMATIC MULCHES ON PLANT GROWTH, TUBER YIELD AND PROCESSING QUALITY IN POTATO

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ABSTRACT : Present investigation besides showing the significance of mulch and non-mulch practices like other mulch studies also showed the effect of colourations of light transmitive cum reflective mulches on size, number, yield, enzyme and non-enzymic browning of tubers and plant growth of potato crop. However, multichromic mulches like red + blue + green or solar light refractive cum reflective poly film mulch produced significantly highest tuber number (3.33-3.41)/plant. But yellow mulch for higher tuber yield both in number (2.83) and weight (32.08g), green mulch for higher tuber yield of bigger size tubers (20-48g) both in number (0.91) and weight (22.50g) and blue + green mulch for small size tuber (below 20g) yield both in number (2.83) and weight (23.75g) per plant were found to be most economical mulches from these point of views among all mulch and non-mulch treatment. Yellow and green mulches were also found as improver of enzymic and non-enzymic browning of tubers.

Key Words : Transmitive cum reflective chromatic mulches, plant growth, tuber yield, quality, potato.