



RESEARCH ARTICLE :

Effect of drip bio fertigation on growth and yield of arabica coffee (*Coffea arabica*) var. Chandragiri

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SUMMARY : Coffee (*Coffea* spp) is one of the most commercially important plantation crops grown worldwide. Coffee occupies a place of pride in international trade next to petroleum. The most important factor that limits the production of coffee is long drought period. Drip fertigation promotes nutrient use efficiency besides ensuring water use efficiency. In recent years, biofertilizers have been found to play a greater role in the integrated nutrient management of crops. The biofertilizers are available in the form of liquid which can be applied through drip fertigation system in a précised manner. The experiment was conducted at Green Pearl Estate at Kottachedu, Yercaud during 2008 and 2009. The investigation was carried out with six year old coffee plants of cv. CHANDRAGIRI. Totally eleven treatments were laid out in a Randomized Block Design and replicated thrice. The results revealed that fertigation and bio fertigation treatments showed significant differences among the growth and yield characters studied. From the results it was observed that the treatment T₉ (Drip fertigaion 75% of NPK RDF + Liquid bio frtilizers) recorded the highest plant height, number of branches per plant, number of nodes per branch, fruit set per cent and yield. It was followed by T₁₀ (Drip fertigation 100% RDF+Liquid bio fertilizers). Whereas the lowest values for plant height, number of branches per plant, number of nodes per branch, fruit set per cent and yield were recorded by T₁ (absolute control).

KEY WORDS :

Coffee-Chandragiri,
Bio fertigation,
Growth, Yield

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