ABSTRACT

A pot study was conducted at the GCU Botanical Garden to assess the combined effect of Simple bio char (BCS), Fe-Enriched Bio char (IBC) with bio fertilizers Processed (BFP) and Bio fertilizers Slurry based (BFSB) for improving the growth and nutrients in the eggplant. Eight different treatments including BCS(1% w/w), IBC (1% w/w), BFP (1% w/w), BFS(1% w/w), SB+ BFP (1% w/w), SB + BFS 1% w/w), IBC + BFP (1% w/w), IBC+ BFS (1% w/w) and a control (C) without BCS, IBC, BFP and BFS were applied in pots. The treatments were replicated thrice. These composite application of 1%BF (P) + 1%BC(S) increased the growth and yield of the eggplant as shown by the results. he In most cases the parameters linked with this parameter showed the best growth and other than that the physical appearance of the plant with this treatment was the best showing the tallest shoot length, with a healthy eggplant grown on the plant, followed by the 1%BC(S) + 1%BF (S). The third effective treatment in terms of plant vegetative growth was application of 1% B(S) followed by 1% Fe-enriched BC. The plant vegetative growth was better than control in all the treatments. However, for the slurry based Bio fertilizer composite treatments the results were not good. So we can try with more or less percentages of these fertilizers that can be beneficial for the growth of the eggplants instead of damaging them. For some parameters the best performing treatments were in the order of 1%BF(P)+ 1%BC(S)>>> 1% BC(S) +1 %BF (SB)>> 1%BF(P) > 1%BC(S) + BF (P) > 1%BC(S) > 1% Fe-Enriched BC > 1% Fe- Enriched BC + BF(P) > 1% Fe- Enriched BC + BF(SB). Hence, composite application of 1%BC(S) + 1%BF (S) can be a good management strategy for improving soil and crop productivity.