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Performance of ECT x BSR Tolerant ECT Hybrid Coconut in High Inoculum Basal Stem Rot Soil of Tamil Nadu

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The coconut cultivar East Coast Tall (ECT) was crossed with ECT tolerant to basal stem rot (Ganoderma) disease collected from disease endemic area of Tamil Nadu (India) to evaluate their performance against Ganoderma lucidum in high inoculum basal stem rot soil. The progeny, ECT x BSR tolerant ECT was evaluated along with nine other cultivars against the disease. BSR tolerant ECT hybrid recorded a higher percentage of survival of 61.1 per cent at 15 years after planting and accordingly a higher cumulative mean nut yield of 126 nuts per palm. The biochemical analysis revealed that the hybrid, ECT x BSR tolerant ECT had a higher content of total phenol as compared to other genotypes. Similarly the activities of peroxidase and polyphenol oxidase were also higher in the hybrid ECT x BSR tolerant ECT compared to other genotypes.

Keywords : Coconut, basal stem rot, ECT x BSR tolerant ECT.