

B-07 Behaviour of some cultivars of *Coffea arabica* L. for natural incidence of coffee leaf rust disease caused by *Hemileia vastatrix* B & Br

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The cultivation of *Coffea arabica* in Sri Lanka had been flourishing well in the late nineteenth century and almost all the plantations were destroyed by the fungus *Hemileia vastatrix* that appeared in 1869. In this study, incidence and severity of coffee leaf rust infection were monitored in later introduced coffee cultivars [Hibrido de Timor (HDT), Catimor, Mn, San Ramon, K7, B072, CA, S3, S4, S5 and S6A]. For assessment of the disease, 5 secondary branches were selected randomly from each of the 5 plants of each cultivar. The total number of leaves and the number of infected leaves were counted and each leaf was rated according to a visual assessment scale, where; 0 = no pustules, 1 = 1-5 pustules, 2 = 6-10 pustules, 3 = 11-20 pustules, 4 = 21-50 pustules, 5 = 51 pustules and above. The disease severity was calculated as the mean of the ratings from individual leaf.

The segregation was observed in relation to the resistance to *H. vastatrix* in HDT, Catimor and S6A. The cultivars HDT, Catimor and S6A almost always had the lower values for percent infection. The cultivar San Ramon, S4 and Mn had moderate values. When the disease severity is concerned, cultivars HDT, Catimor and S6A had behaved the same way as percent infected leaves. Cultivars San Ramon and S4 had comparatively less disease severity values than the other cultivars. When both parameters were accounted, it can be stated that out of 11 cultivars tested HDT, Catimor and S6A are more resistant and the cultivar San Raman and S4 are moderately resistant to coffee leaf rust disease.