THE EFFECT OF NITROGEN DEFICIENCY ON PLANT WATER RELATIONS IN TEA (*CAMELLIA SINENSIS*)

S. Nagarajah
(Tea Research Institute, St. Coombs, Talawakele, Sri Lanka)

An experiment was carried out to study the effect of nitrogen deficiency on the plant water relations of tea (*Camellia sinensis*). The plants were grown in sand and nitrogen deficiency induced by withholding the supply of nitrogen. Nitrogen deficiency reduced the transpiration rate by increasing stomatal diffusive resistance. Although nitrogen deficiency increased the stomatal diffusire resistance during the day it did not impair the capacity of the stomata to open fully in the morning. The leaf water potential and root resistance to water flow were not affected by nitrogen deficiency. The sensitivity of transpiration to sand water stress was increased by nitrogen deficiency.