Coffee trees spaced at 5000 or 6667/ha received the following irrigation treatments: no irrigation; irrigation every 2 or every 8 weeks; April-June; July-September; October-December; or January-March. The effects of these treatments on the total yield/tree, yield of clean coffee/ha, and percentage of early crop were determined and the results are tabulated. The total yield and that of clean coffee were highest from trees irrigated between October and December, and the next highest from trees irrigated every 8 weeks. However, the percentage of early crop was highest (39%) in trees irrigated between January and March and next highest (37%) in those irrigated between October and December. It is suggested that in high density coffee, periods of soil water deficit are necessary for high yields. The implications of the findings are discussed. Data are also tabulated on the effects of spacing on leaf water potential in trees planted at 5000-20 000/ha.