Abstract

The aim of this study was to estimate the effect of the association between carrot and lettuce crops in several intercropping systems through different yield advantage indexes, as well as to assess which system is better for the environmental resources management with respect to productivity and economic indicators. A ‘group balanced block’ experimental design was used, with four replications. Cultivars of lettuce crispleaf (‘Lucy Brown’, ‘Tainá’, ‘Laurel’ and ‘Verônica’) and looseleaf (‘Babá de Verão’, ‘Maravilha das Quatro Estações’, ‘Elisa’ and ‘Carolina’) groups were evaluated in intercropping systems with ‘Alvorada’ and ‘Brasilia’ carrot cultivars. The land equivalent ratio (LER) and yield efficiency index (YEI) were estimated, besides economic indicators such as gross (GI) and net (NI) income, modified monetary advantage (MMA), return rate (RR) and profit margin (PM). The evaluated indexes showed that carrot is the dominant and lettuce the dominated crop. Higher biological/agronomic efficiency indexes and economic indicators were observed in intercropping systems with ‘Brasilia’ carrot as component crop and that based on the crispleaf lettuce group.

Keywords

Agronomic Efficiency Index, Daucus carota L., Economic Efficiency Index, Intercropping Experiments, Lactuca sativa L.