Intercropping peanut and maize under different fertilization treatments

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Two field trials were carried out at Ismailia Agricultural Research Station in 2003 and 2004 summer seasons in sandy soil, to study the interaction effect among intercropping patterns: peanut: maize (2:1), (1:1) and (1:2); orientation of maize plants (the shade crop): spacing maize plants at 35cm. apart and leaving one plant/hill , spacing maize plants at 70cm. apart and leaving two plants/hill and nitrogen fertilizer levels: 60, 90 and 120 Kg N/fed. Pure stand plots of both peanut and maize were included in each replicate for competitive relationship essays. Treatments were assigned randomly in factorial Randomized Complete Block Design (RCBD) and replicated for four times. Peanut cv. Giza 5 (Main crop – understory crop) was planted on 23rd and 25th May in 2003 and 2004 seasons, respectively, whereas maize cv. single cross 10 (Shade crop – overstory crop) was planted on 13th and 15th June in 2003 and 2004 seasons, respectively. Peanut was planted with intra spacing of 10cm. apart on one side of the ridges with population of (70000 plants/fed.) when intercropped or in pure stand.