Abstract
With the advent of new pineapple cultivars and because in Mexico there is technology management only for cultivar Smooth Cayenne, the aim of this research was to evaluate the yield and fruit quality of three pineapple cultivars grown under three planting densities in a subhumid tropical conditions. The trial was carried out using a split plot design in four randomized blocks, with three planting densities (30 000, 45 000 and 60 000 plants/ha) and three cultivars (`Champaka`, `Oro` and `Smooth Cayenne`). Fruit weight and its relation with foliar area, fruitlet number and yield; total soluble solids and titratable acidity for three fruit lengthwise sections; peduncle length, density and crown weight of fruits; and fruit diameter for three lengthwise sections, the rate between top and basal section diameter and fruit shape, were measured. For 30 000 plants/ha, `Smooth Cayenne` fruit weight and yield were higher than those of `Champaka` and `Oro`, while at 45 000 and 60 000 plants/ha `Champaka` was similar to `Smooth Cayenne`. In fruit weight and yield 30 000 plants/ha, the fruits were 8.5 and 16 % heavier than at 45 000 and 60 000 plants/ha, respectively. With 60 000 plants/ha, yield was higher than 100 t ha-1 in all cultivars. `Champaka` and `Oro` fruits had higher total soluble solids than fruits of `Smooth Cayenne`, and there were no significant differences for titratable acidity among cultivars. `Oro` did not show conical shaped fruits, whereas `Smooth Cayenne` showed more conical fruits than Champaka at 30 000 plants/ha. `Champaka` could be a better option for domestic fresh market at 30 000 plants/ha, and for fresh export market at 60 000 plants/ha. `Oro` showed the highest fruit quality and it shawed potential for both market types.

Keywords
Ananas comosus, cultivar, planting density, yield and quality.