Ora-pro-nobis (*Pereskia aculeata* Mill.) is an edible leaf cactus whose consumption is encouraged by the Brazilian government due to the high content of minerals and proteins. Its fruits are a source of nutrients. One way of processing it that can lead to better use and acceptance is the formulation of unfermented drinks such as juices. In this work, four formulations were prepared and assessed, all of which contained between 500 g of fruit and 1L of water, added to 20% of sugar. Fresh and treated-fruit were used (water immersion at 95 °C for 3 minutes) with and without the addition of 10% of lemon juice to the mass of the fruit, resulting in soluble solids between 8.9 and 9.2 °Brix, titratable acidity between 6.8 and 2.8 and pH between 3.3 and 4.3. The juices were analyzed sensorially standardized at a temperature of 8 ° C in an acceptance test with untrained panel in 9-point hedonic scale. For aroma, color and texture, the acceptability index showed acceptance between 62.5 and 81.3%. As for taste, the juice that underwent heat treatment without the addition of lemon showed the best acceptability index (76.6%) and greater concordance coefficient (47.6%), among the judges, followed by fresh juice, also without lemon. The fruits of ora-pro-nobis are poorly used for human consumption, but the results of the juices acceptance without lemon demonstrated good potential for use in various processed food products.