Yogurt, a fermented milk product, is part of human eating habits since former times when the fermentation was utilized as a process to preserve milk. Jambolão (*Syzygium cumini*) is a plant from the family Myrtaceae, also popularly known as jamelão, cherry, jalão, jambu, olive from northeast, purple plum, murta, widow earring, oliveira, among other names. In order to offer a nourishing product with a good acceptance and accessible to the population, this research aimed at producing a Jambolão yogurt flavor as well as evaluating its physicochemical characteristics. The following physicochemical analyses had been carried out: pH, acidity, fat, protein, reducing sugars and total reducing sugars, ashes, humidity, water activity, lactose of yogurt, milk and pulp according to the norms of Adolfo Lutz Institute (2005). Only one formulation has been produced in order to carry out preliminary tests and to observe the Jambolão fruit's reaction in contact with yogurt in a proportion of 5% of pulp. The obtained results were the following: acidity (7.72±1.37), pH (4.4±0.1), humidity (22.30%±0.008), ashes (0.49%±0.08), fat (3.70±1.13), protein (2.86±0.16), both are in accordance with Brazilian legislation, except the protein which obtained a slightly result below the permitted minimum value. Therefore, one verifies that the Jambolão pulp is a viable and enriching alternative for milk products. Also, according to this research’s obtained results, one observes that the formulation may be improved by presenting excellent results of physicochemical composition.