Brazilian ginseng (*Pfaffia glomerata*) is a plant widely used in folk medicine as tonic and to treat gastric disturbances and rheumatism. Studies have been demonstrated that Brazilian ginseng have surfactant and emulsifier properties and can be applied in food industries. Commercially, extracts of Brazilian ginseng roots are obtained by fixed bed percolation, which the contact of solvent with raw material occurs during a determined time. In order to increase the extraction yield obtained by this method, an ultrasonic apparatus was coupled, which allows the bioactive compounds extraction. The apparatus is constituted by an ultrasonic bath (40kHz, 80W), a thermostatic bath, a glass column (16.3mm x 146mm) and a pump. Experiments of extraction were performed at 40 and 60°C using a mixture of water:ethanol (30:70) as solvent with a ratio of mass of raw material:solvent volume of 1:10. The yield obtained at 40 and 60°C were 31.7 and 33.4%, respectively. When it was carried out the ultrasound assisted extraction an increase of 7.3% at 40°C and 3.6% at 60°C was observed, demonstrating that the utilization of ultrasound assisted process are promising. Studies will be performed in order to optimize this process in relation of saponin selectivity. In addition, the economic viability also will be done.

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