DEVELOPMENT OF PILSEN TYPE HOME BREWING BEER CONTAINING BOLDO (Peumus Boldus M.)

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Boldo (Peumus boldus M.) is an endemic plant whose leaves are used to prepare infusions to treat digestive and/or hepatobiliary disorders, but has a bitter flavor. Since bitterness is a characteristic of beers flavor, this study aimed to evaluate the use of boldo leaves as partial substitute of hops in home brewing of Pilsen type beer. Three formulations were elaborated, being Formulation 1 pilsen type beer without boldo (control), Formulation 2, containing same concentration of hops added to control plus 13g of boldo leaves, and Formulation 3 containing 13g of boldo leaves in substitution of hops added at other previous formulations. Sensory evaluation and physicochemical analyses were carried out. Formulations 1 and 3 demonstrated higher index of acceptability, 78.33 and 78%, respectively, whereas Formulation 2 showed 67.88% of acceptability. Formulations 1 and 3 also presented diacetil values below 0.10 mg/L, considered the limit value for acceptance. Bitterness of Formulations 1, 2 and 3 were, respectively, 15.53, 23.53 and 11.50 (IBU), which corroborates with the sensory analysis results, where consumers claimed that Formulation 2 presented the most bitterness flavor, being the less acceptable beer. Based on the results, it was possible to develop a home brewing beer added of boldo leaves as partial substitute of hops, with good sensory acceptability and physicochemical parameters characteristic of low fermentation beers. Partially replacement of hops by boldo leaves during the boiling step is viable and a good alternative, since hops are imported and expensive, and boldo leaves are easily found in our country.