Eupatorium intermedium is a native species found in Southern Brazil belonging to the Asteraceae family. This family presents a great wealth of species with therapeutic interest, many of them, widely studied from the chemical and pharmacological point of view. This study investigated the chemical composition, yield and the antimicrobial potential of the essential oil of the inflorescences of Eupatorium intermedium. The biological study was carried out with four bacterial strains such as Escherichia coli, Bacillus cereus, Staphylococcus aureus, Listeria monocytogenes. Collection was carried out in the Private Reserve of Natural Heritage (RPPN) Butuquara, county of Palmeira – PR, with training in general fields. Extraction of essential oil from fresh inflorescences was performed by hydrodistillation in a Clevenger type apparatus. The antibacterial assays were performed by agar diffusion method, using tetracycline as a positive control. The inflorescences essential oil yield was 1.02%. The chemical composition indicated the presence of α-Pinene (25.88%), Sabinene (2.74%), β-Pinene (39.12%), Myrcene (2.76%), α-Phellandrene (1.19%), p-Cymene (3.67%), Limonene (12.36%), (E)-β-Ocimene (2.95%), (E)-Caryophyllene (1.51%), trans-Muurola-4(14)5-diene (4.03%), Bicyclogermacrene (2.71%), Spathulenol (1.08%). On the other hand, the antibacterial assay demonstrated that pathogen bacteria assayed were sensitive to essential oil. L. monocytogenes has shown an inhibition halo with 16mm, E. coli 14 mm, B. cereus 14 mm and S. aureus an inhibition halo with 13mm. However, further studies are necessary to determine the optimal concentrations of Eupatorium intermedium to act as a natural antimicrobial. It was verified that E. intermedium essential oil presents chemical components of great importance, which have biological activity and can be applied in the protection of foods as antimicrobial, in pharmaceutical formulations, confirming the importance of the Asteraceae family as a source of bioactive compounds.