Beans are legumes widely consumed in Brazil. It is notable for its high content of carbohydrates and proteins, however few studies are available on the secondary metabolites. Phenolic compounds (CP) found in beans are important phytonutrients, whose function has been attributed in part to its antioxidant activity. Several studies report the importance of total phenols (FP) in reducing the risk of developing chronic diseases. The objective of this study was to determine the levels of (FP), antioxidant activity (AA / ABTS•+ and DPPH•) in addition to reducing power (PR) of six genotypes of bean (Vigna unguiculata / Irecê, Phaseolus vulgaris / Irecê, Phaseolus vulgaris/Guanambi, Phaseolus lunatus/Guanambi, Phaseolus lunatus/ Guajeru, Phaseolus vulgaris/Irecê) consumed in the state of Bahia. The (FP) was determined by Folien-Ciocauteau (RFC) to (AA) was used two methods, (capture free radical ABTS•+ (2,2-azinobis-[3-ethyl-6-benzotiazolin sulfonic acid]) and DPPH (2,2 - Diphenyl-1-picrylhydrazyl) and (PR). it was found that the cultivars of bean Phaseolus vulgaris (carioca) were genotypes that showed the highest levels of (FP). Beans carioca/Guanambi stood out with the largest (AA) by the method of DPPH• compared with the other matrices studied. The test ABTS•+ bean/Irecê showed higher (AA) in comparison with other genotypes. It is assumed that the synergistic effect of (FP) contributed to (AA) in vitro. Thus, it is evident the importance of measuring the antioxidant activity by more than one method, considering the reactivity of the phenolic compounds present in different matrices studied, compared to methods used. Therefore, its use should be encouraged, considering it a source of natural antioxidants.