The responsible agent of rust in common bean (Phaseolus vulgaris L.) is U. appendiculatus, a pathogen that reduces bean production in temperate localities with humidity periods of 10 h at least. In México rust causes yield losses up to 80 %. Resistance of common bean to U. appendiculatus is regulated by at least 11 genes, namely Ur-3, Ur-4, Ur-5, Ur-7, Ur-9, Ur-11, Ur-12, Ur-Ouro Negro, plus two more unnamed genes. These genes confer resistance to several rust races depending on the combination present, which provide evidence that genes are arranged into clusters and that resistance is race-specific. The aim of our research was to identify the rust resistance genes contained in a rust-resistant common bean genotype ('PTB 08005') and in two rust-susceptible varieties ('Pinto Maverick' and 'Pinto Fresnillo'), in order to determine the specific gen combination conferring resistance to the U. appendiculatus races prevalent in the state of Guanajuato, México. The genes identified in the resistant variety, but not in the susceptible ones, were Ur-3, Ur-4, Ur-7 and Ur-11. In addition, six experimental lines of Pinto bean type were also tested to determinate their potential resistance to the fungus. The experimental line 117 had the same resistance genes as genotype 'PTB 08005'.

Keywords
Phaseolus vulgaris, Ur genes, molecular markers, rust disease resistance.