The objective of this work was to characterize, at the biochemical level, two Mexican native landraces Bayo Berrendo and Patzcuareño of common bean. Storage protein from seeds was extracted from two common bean (Phaseolus vulgaris) varieties (Bayo Berrendo and Patzcuareño), and their respective electrophoretic patterns were compared. Total soluble protein was 16.47% for Bayo Berrendo, and 14.53% for Patzcuareño. Differences were also detected in the albumin fraction. Moreover their flour showed high inhibitory activity against trypsin mainly in the phaseolin fraction, which corresponded to 355 units in the Bayo Berrendo and 507 units in the Patzcuareño variety. The elemental composition of the flour was also determined and showed differences. The Bayo Berrendo seed flour has a composition of 0.15% Ca, 5.53% K and 0.60% Mg. While values for the Patzcuareño flour were 0.17%, 3.52 and 0.67% respectively. Interestingly the Bayo variety contained 18.8 ppm iron, while Patzcuareño contains only 3.63 ppm. Other variables related to food usage were analyzed such as water absorption capacity, which showed values near 100% for both landraces, and cooking time which took less than 110 minutes. Phenotypically, the two landraces are different in both size and color. The weight for 100 seeds of the Bayo Berrendo variety was 14.6 g and for Patzcuareño 32.6 g.

Keywords
Bean mineral content, protease inhibitors, electrophoretic protein pattern, diversity in native bean proteins.