Abstract

The imported black seeded bean type is known in Mexico as Negro Michigan, even after being grown in Mexico. The seed traits responsible for the high demand of imported Negro Michigan that has competitive advantages in the national market are unknown; however. A survey was conducted among merchants and consumers in order to define which traits make the difference between the local black beans and the imported Negro Michigan. On the other hand, some physical properties, such as seed appearance, cleanliness, seed shape and size, seed color, seed coat content and thickness were recorded on commercial black seeded samples, bred lines and cultivars, as well as imported Negro Michigan and T39 produced in Mexico. Also data were taken on water sorption capacity, soluble solids and broth thickness. Cook bean flavor was important for 41% of consumers. Therefore, the physical appearance of the local bean grain must be improved to be able to compete with the imported black bean, and sensorial studies among consumers should be conducted when a new cultivar is going to be registered for commercial production. Among the bred lines tested, some displayed similar quality traits as Negro Michigan and could be registered and increased for commercial production since they are suitable for the national market due to its high quality and proven productivity.

Keywords

Grain cleanliness, grain uniformity, broth thickness, flavor.