

Cowpea Market Class Seed Characteristics Effect on Production Factors

Cowpeas are an important crop grown for various market classes, including brown crowder peas, pink-eyed peas, black-eyed peas, and cream peas. Each market class is distinguished by characteristics such as seed size, shape, and color, which influence their commercial production, processing, and consumer appeal. However, there is limited research on how specific seed size traits affect yield and customer preference. This study aims to identify seed size characteristics that impact the yield and consumer preference of these market classes. By analyzing traits such as seed height, weight, and texture, the research seeks to provide valuable insights for optimizing the commercial production of cowpeas. The study involves data collection and analysis of several market classes of cowpeas. Seed pods were opened, and seeds were counted, measured for height, and weighed. Specific traits such as the 100-seed weight were recorded for each variety. Seeds were organized by block and plot to ensure accurate analysis and traceability. Preliminary observations suggest distinct differences in seed shape and size between market classes, with brown crowder peas exhibiting a more rounded shape and black-eyed peas displaying an oval form with a characteristic eye. These seed traits could influence factors such as processing efficiency and consumer preferences. Understanding the seed size characteristics of different cowpea market classes is essential for improving yield, processing methods, and consumer appeal. The findings of this study may guide plant breeders and farmers in selecting desirable seed traits for commercial production.