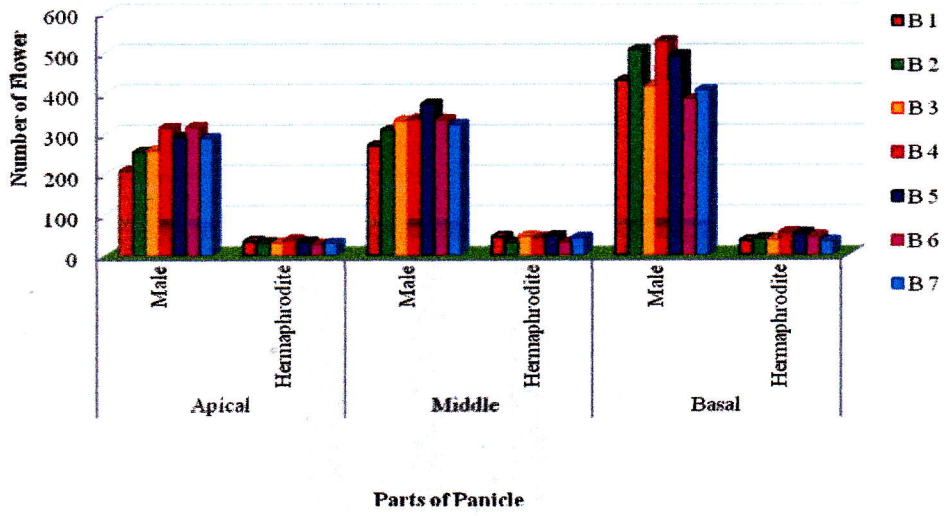

Figure 3. Number of male and hermaphrodite flowers in year 2012

Male and hermaphrodite flower numbers on different parts of panicle was quite variable. This findings are supported by Majumdar and Mukherjee (1961) and Desai *et al.* (1985) who observed highest percentage of perfect flowers on the basal and lowest on the apical portion. The variability in the flower sex ratio seems to be governed by a cultivar of physiological and environmental conditions in each year.

Total number of flowers per panicle

Data regarding total number of flowers per panicle showed significant difference in each year. The highest male flower was observed in year 2012 which was 7382.33. Similarly the maximum hermaphrodite flower was found in year 2012 which was 803.00 and also that of the total 8185.33 (Table 4).

Table 4. Total male, hermaphrodite and overall total flowers in a panicle at year 2010, 2011, and 2012.

Year	Total Male Flower	Total Hermaphrodite Flower	Overall Total Flower
2010	6706.97	716.60	7423.57
2011	6402.77	668.77	7071.53
2012	7382.33	803.00	8185.33

Radio of male and hermaphrodite flowers

Significantly (P>0.05) highest number of male to hemaphrodite flowers were observed in year 2011 which was 9.6 : 1 and the lowest in year 2012 which was 9.2 : 1 (Table 5). This result was strengthened by (Burns and Prayag, 1921; Popenoe, 1917; Maheshwari 1934; Musahib-ud-Din and Dinsa, 1946; Bajwa *et al.*, 1956; Singh, 1971; El-Nabawy *et al.*, 1983; Gunjate *et al.*, 1983; Pimentel *et al.*, 1984; Chadha and Pal, 1986; Baghel *et al.*, 1988; Hussein *et al.*, 1989; and Joubert *et al.*, 1993) who observed a variable proportion of hermaphrodite/perfect flowers to the male/staminate flowers (sex ratio) within the panicles, trees and among the cultivars but it was usually less than 50%.