Coriander (Coriandrum sativum L.) belonging to Apiaceae family is one of the essential oil and spice plants in the world. Developmental stage at harvest is an important factor influencing seed yield and essential oil quality in coriander because of the changes during maturation period in fruits. This research was conducted in order to investigate adaptation and suitable harvesting stage in two coriander varieties (var. vulgare Alef. and var. microcarpum DC.) during 1999 and 2000 in temperate climatic conditions of the Central Black Sea region (Tokat) in Turkey. Field study was designed as a randomised block with a split-plot arrangement. Varieties were harvested at six different harvesting stages, from unripe-fruit periods to over ripened periods. The results indicated that var. microcarpum of coriander was more suitable for mild temperate climatic conditions of Central Black Sea Region. Brown-fruit stage in fruit developmental stage (45 days in var. vulgare and 40 days in var. microcarpum after the flowering) was suitable for harvesting stage. Both early and late harvesting stages caused yield losses and lower linalool content.