The guava (Psidium guajava L.) is one of the most common and important fruit crop cultivated all over India. It is a popular fruit among people primarily because of its moderate price in market and also being a rich source of vitamin C. Botanically guava belongs to the large family of Myrtaceae. It is classified under genus Psidium, which contains 150 species, but only Psidium guajava has been exploited commercially. It is also a good source of carbohydrates, minerals, iron, calcium and phosphorus. It possesses a high nutritional value. According to Singh et al. (1963), each 100 grams of edible portion of guava contains 76.0 g of moisture, 1.5 g protein, 0.2 g fat, 14.5 g carbohydrates, 0.01 g calcium, 0.04 g phosphorus, 1.0 g iron, 30.0 mg thiamine, 30.0 mg riboflavin, 299.0 mg ascorbic acid and 0.02 mg nicotinic acid.

RESEARCH METHODS
The present investigation entitled effect of plant growth regulators on quality of winter season guava (Psidium guajava L.) cv. L–49 (SARDAR) was under taken during monsoon 2009-10 at the Horticultural Instructional Farm, Chimanbhai Patel College of Agriculture, Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar, District-Banaskantha, Gujarat. The experiment was conducted in guava orchard planted at 6 x 6 m distance. The experiment was conducted in Randomized Block Design with nine treatments and four replications. The treatments consisted of T1 (Control), T2 (GA3 50 ppm), T3 (GA3 100 ppm), T4 (NAA 20 ppm), T5 (NAA 40 ppm), T6 (2,4-D 5 ppm), T7 (2,4-D 10 ppm), T8 (CCC 250 ppm) and T9 (CCC 500 ppm). Two sprays of PGRs i.e. 1st spray at last week of June and 2nd spray at second week of July were taken.

RESEARCH FINDINGS AND DISCUSSION
The quality of guava fruit was improved with varying concentrations of NAA. Amongst different concentrations, NAA 40 ppm significantly enhanced the quality parameters viz., TSS (10.95 and 10.87 %), reducing sugar (3.79 and 3.65 %), non-reducing sugar (2.65 and 2.56 %), total sugar (6.44 and 6.21 %), and ascorbic acid content (180.30 and 173.97 mg/100g pulp, respectively). The minimum acidity (0.42 %) was also observed with 40 ppm treatments.

ABSTRACT: An experiment was undertaken to study the effect of NAA, GA3, CCC and 2,4-D on quality of guava during monsoon 2009-10 at the Horticultural Instructional Farm, C.P. College of Agriculture, S. D. Agricultural University, Sardarkrushinagar, Gujarat. In present investigation, application of 40 ppm and 20 ppm NAA significantly enhanced the quality parameters viz., TSS (10.95 and 10.87 %), reducing sugar (3.79 and 3.65 %), non-reducing sugar (2.65 and 2.56 %), total sugar (6.44 and 6.21 %), and ascorbic acid content (180.30 and 173.97 mg/100g pulp, respectively). The minimum acidity (0.42 %) was also observed with 40 ppm treatments.

KEY WORDS: Guava, PGRs, Quality