

## Knowledge and Adoption of Wheat Production Technology by the Farmers of Sabarkantha District

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### ABSTRACT

*An attempt was made to study practice wise knowledge and adoption of wheat production technology by the farmers of Sabarkantha district. The present study was conducted in 4 talukas having highest area under wheat crop of sabarkantha district. The sample of study was 100 respondents. The data were analyzed in terms of frequency and percentage in order to get meaningful results. The analysis of results showed that majority of respondents had knowledge about late sown wheat varieties, timely sown wheat varieties, sowing period for timely sown wheat, post-emergence weedicides, number of irrigations for timely sown wheat and sowing distance for wheat crop. The majority of respondents had adopted timely sown wheat varieties, late sown wheat varieties, post emergence weedicides, sowing distance, numbers of irrigations for timely sown wheat and sowing period for timely sown wheat.*

**Keywords:** *Wheat production technology, Knowledge, Adoption*

### INTRODUCTION

Wheat is the most important staple food grain of human race, only next to rice. It is the chief source of food of half of the world. In India, it occupies a premium place among cereals. Wheat is an important *rabi* crop of the Sabarkantha district. Area under wheat crop in the district is the highest than other *rabi* crops. Many recommendations are made to get maximum output/return from wheat crop. The crop has wide potential for improving its production and productivity by adoption of improved wheat production technology. Though, it was observed that farmers were not adopting all recommended wheat production technologies. Thus, it was felt necessary to know the knowledge and adoption of package of practices of wheat production technology by the farmers of Sabarkantha district.

### OBJECTIVES

- (i) To study the knowledge of wheat production technology by the wheat growers
- (ii) To study the adoption of wheat production technology by the wheat growers

### METHODOLOGY

Sabarkantha district has 14 blocks (talukas). Wheat is an important cereal crop of the district. Wheat has

maximum area as compared to other *rabi* crops in the district. Out of 14 talukas, 4 talukas having highest area under wheat crop were selected purposively. From each taluka, 5 villages were selected randomly. Taluka-wise selected villages are as under:

Sr. No.	Name of talukas	Name of villages
1	Idar	Goral, Revas, Abdasan, Lalpur(Ba), Ratanpur
2	Modasa	Munsivada, Anandpura kampa, Volva, Gajan, Sakaria
3	Bhiloda	Vajapur, Takatunka, Bhutavad, Dholvani, Ganti
4	Himmatnagar	Karanpur, Hadiyol, Akodra, Kashipura kampa, Panpur

From each selected village, five wheat growers were selected randomly. The data were collected with the help of structured interview schedule, Keeping in view the objectives of the study, the interview schedule was developed with the help of experts. The data were transferred into master table and analyzed in terms of frequency and percentage in order to make findings meaningful.

**RESULTS AND DISCUSSION**

**Knowledge about recommended package of practices**

**Table 1 : Distribution of the respondents according to the knowledge of recommended package of practice of wheat n=100**

Sr. No.	Package of practices	Frequency	Per cent
1	Timely sown wheat varieties	92	92
2	Sowing period for timely sown wheat	85	85
3	Late sown wheat varieties	96	96
4	Sowing period for late sown wheat	47	47
5	Name of insecticide for termite control	52	52
6	Rate and method of application for termite control	46	46
7	Seed rate for timely sown wheat	26	26
8	Seed rate for late sown wheat	24	24
9	Sowing distance	75	75
10	Fertilizer dose for timely sown wheat	24	24
11	No. of top dressings for timely sown wheat	10	10
12	No. of irrigations for timely sown wheat	77	77
13	Critical stages for irrigation	26	26
14	Time in days for last irrigation application	49	49
15	Name and dose of weedicide		
	Pre-emergence	23	23
	Post-emergence	78	78

The data in Table 1 revealed that 96.00 per cent and 92.00 per cent respondents had knowledge about late sown wheat varieties and timely sown wheat varieties respectively. The respondents had knowledge about sowing period for timely sown wheat (85.00 per cent), post-emergence weedicides (78.00 per cent), number of irrigations for timely sown wheat (77.00 per cent), sowing distance (75.00 per cent) and name of insecticide for termite control (52.00 per cent). The less than half number of respondents had knowledge about recommended wheat production technologies viz; time in days for last irrigation application, sowing period for late sown wheat and rate and method of application for termite control. The nearly and less than one fourth number of respondents had knowledge about recommended wheat production technologies viz; seed rate for timely sown

wheat, critical stages for irrigation, seed rate for late sown wheat, fertilizer dose for timely sown wheat, pre-emergence weedicides and number of top dressings for timely sown wheat.

**Adoption of recommended package of practices of wheat production technology by wheat growers**

**Table 2 : Distribution of the respondents according to the adoption of package of practices of wheat production technology n=100**

Sr. No.	Package of practices	Frequency	Per cent
1	Timely sown wheat varieties	81	81
2	Sowing period for timely sown wheat	62	62
3	Late sown Wheat varieties	80	80
4	Sowing period for late sown wheat	40	40
5	Name of insecticide for termite control	48	48
6	Rate and method of application for termite control	42	42
7	Seed rate for timely sown wheat	09	09
8	Seed rate for late sown wheat	20	20
9	Sowing distance	70	70
10	Fertilizer dose for timely sown wheat	20	20
11	No. of top dressings for timely sown wheat	09	09
12	No. of irrigations for timely sown wheat	70	70
13	Critical stages for irrigation	18	18
14	Time in days for last irrigation application	40	40
15	Name and dose of weedicide		
	Pre-emergence	23	23
	Post-emergence	75	75

The data in Table 2 showed that 81 per cent and 80 per cent of respondents had adopted timely sown wheat varieties and late sown wheat varieties, respectively. The respondents had adopted post emergence weedicides (75.00 per cent), sowing distance (70.00 per cent), numbers of irrigations for timely sown wheat (70.00 per cent) and sowing period for timely sown wheat (62.00 per cent). The less than half number of respondents had adopted recommended wheat production technologies viz; name of insecticide for termite control, rate and method of application for termite control,

sowing period for late sown wheat and time in days for last irrigation application. Less than one fourth of the respondents had adopted pre-emergence weedicides, fertilizer dose for timely sown wheat, seed rate for late sown wheat and irrigation at critical stages.

**Yield**

**Table 3: Distribution of the respondents according to the yield kg per hector** n=100

Sr. No.	Yield (Kg per hector)	Frequency	Per cent
1	3000 to 3500	30	30
2	3501 to 4000	25	25
3	4001 to 4500	19	19
4	Above 4501	26	26

The data in Table 3 indicated that 30 per cent of respondents got wheat yield in the range of 3000 to 3500 kgs per hectare. The 26.00 per cent and 19.00 per cent of the respondents got wheat yield above 45000 kgs and in between 4001 to 4500 kgs per hectare, respectively. Only 19.00 per cent got wheat yield in the range of 3000 to 3500 kgs per hectare.

**CONCLUSION**

From the present study it can be concluded that majority of the respondents had knowledge about late and timely sown wheat varieties, sowing period for timely sown wheat, post-emergence weedicides and number of irrigations for timely sown wheat, sowing distance. Very less number of the respondents had knowledge about seed rate for timely and late sown wheat, critical stages for irrigation, fertilizer dose for timely sown wheat, pre-emergence weedicides and number of top dressings for timely sown wheat.

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