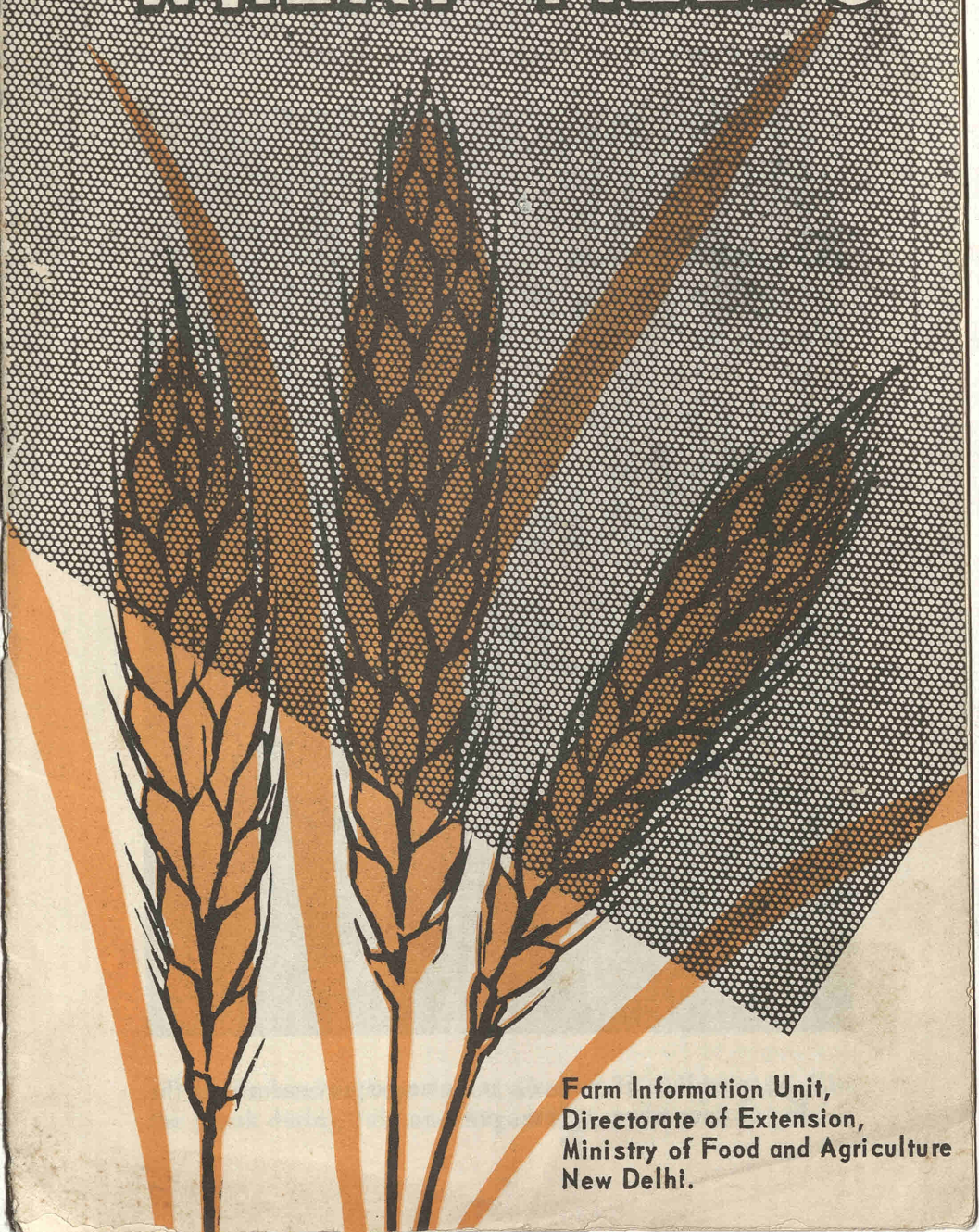


Information Leaflet No.20

THE WAY TO HIGHER **WHEAT YIELDS**



Farm Information Unit,
Directorate of Extension,
Ministry of Food and Agriculture
New Delhi.

By the middle of September, give shallow ploughings with a *desi* plough and plank alternately or use a *bakhar* to bring the soil to a fine tilth.

WHEAT NEEDS PROPER MANURING

Give your wheat crop sufficient manure to yield well. In the case of irrigated wheat you need not give any more manures if you had practised green manuring and had applied phosphate. Apply 100 to 150 maunds of well-rotted farmyard manure as a basal dressing at least one month before sowing wheat, if you grow the crop after a fallow. In addition, apply

- (i) two maunds of castor cake and one maund of superphosphate or bonemeal, or
- (ii) half a maund of sulphate of ammonia and one maund of superphosphate or bonemeal, or
- (iii) ten seers of urea and one maund of superphosphate or bonemeal, or
- (iv) 14 seers of ammonium sulphate nitrate and one maund of superphosphate or bonemeal.

Apply superphosphate or any of the mixtures in furrows behind the plough, or with the seeding spout attached with a three-tine cultivator.

If you are raising wheat under rain-fed conditions, apply 100 maunds of well-rotted farmyard manure during land preparation and about a month before the sowing of wheat.

WHEAT DOES NOT LIKE WHITE ANTS

If there is a threat of white ant attack, dust the field during land preparation with $2\frac{1}{2}$ seers of ten per cent. or five seers of five per cent B.H.C., or five to $7\frac{1}{2}$ seers of five per cent 'Aldrin' per acre. If the crop is line-sown, apply the dust in furrows at the time of sowing.

IMPROVED VARIETIES YIELD BETTER

There are a number of improved varieties of wheat suitable for growing in the different wheat areas. Your



Agricultural Officer or the Gram Sevak can help you select the variety that is best for your area.

Uttar Pradesh

K-13 An early maturing, bearded variety with semi-hard grains of amber colour; is susceptible to diseases; grown in central Uttar Pradesh.

N.P.710 A high-yielding cosmopolitan wheat of medium early maturity; fully bearded and with grains of good quality; tolerant to rusts and highly resistant to loose smut; it is grown widely in Uttar Pradesh, particularly in the central districts.

N.P.718 A high-yielding, early-maturing variety that can be grown with less irrigation; has good quality grain; tolerant to rust, and highly resistant to loose smut; suitable for the western districts.

N.P.720 A high-yielding wheat of medium maturity; fully bearded with black awns; grains hard and of amber colour; susceptible to yellow rust; suitable for southern Uttar Pradesh, particularly for the Bundelkhand area.

Hill Wheats

N.P.809 A high-yielding wheat; suitable for both higher and lower altitudes in the hills; resistant to loose smut and all the three rusts.

Ridely A short, stiff-strawed variety with high yields; resistant to loose smut and rusts; suitable for low and medium elevations in the hills.

Punjab

C-281 A high-yielding early variety; fully bearded with good grains; suitable for the Hariana tract.

C-286 A high-yielding bearded variety with hard and bold grains (very good for *chapaties*); suitable for late sowing.

C-591 An old general purpose wheat; suitable for cultivation all over the Punjab. It has now been replaced by other better varieties.

C-273 A variety of medium maturity; awned with plump grains of amber colour; stands high levels of fertility without lodging.

Hill Wheats

N.P.770 A variety suited to high elevations; awned; resistant to yellow rust and loose smut; suited to the Simla Hills.

N.P. 809 As described before.
and Ridley

Department of Bioscience

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N.P.829 An early variety; awnless; suitable for the lower hills; better than *Ridley* in yield and grain quality.

Delhi

N.P.718 Already described.

N.P.824 A high yielder of medium maturity; fully bearded; tolerant to rusts and highly resistant to smut; responds well to irrigation and heavy fertilization.

C-281 Already described.

Madhya Pradesh

HY-11 A good variety of mid-late maturity; fully bearded with semi-hard grains of amber colour; highly resistant to stem rust; suitable for the northern districts, both under irrigated and un-irrigated conditions.

HY-65 A variety of medium maturity; fully bearded with attractive grains; suitable both for irrigated and un-irrigated conditions, but responds better to irrigation.

N.P.710 A variety suitable for alluvial soils of the northern regions of the State.

C-281 Suitable for the alluvial soils of the northern regions of the State; has possibilities for Bhopal region also.

Rajasthan

R.S.31-1 An early variety; fully bearded; drought-resistant and high yielding. A cross between C-591 and a local variety; it is suitable for central Rajasthan consisting of Jaipur, Sawai-Madhapur and some parts of Jodhpur and Dungarpur.

N.P.718 Suitable for Udaipur, Kotah and part of Jaipur division.

C-591 Suitable for all canal-irrigated areas of Sriganganagar and Bharatpur; susceptible to some serious seed-borne diseases.

Bombay

Motia-x An early maturing variety, fully bearded, with hard grains of amber colour; suitable for all wheat-growing talukas of West Khandesh district.

Gulab Fully bearded with hard grain having pinkish oily lustre; suitable for East Khandesh district and the 'Bhal' tract of Gujarat.

Jaya and Vijay Early varieties; fully bearded with pale yellow grains; suitable for Nasik and Ahamadnagar districts and the wheat tract of Karnatak.

Niphad-4 An early variety; rust-tolerant; responds well to irrigation; better in yield and suitable for the whole of Bombay State.

Kenphad-21 and Kenphad-25 Suitable for barani conditions, but respond well to irrigation; bearded; highly resistant to stem rust; grow well in medium black soils.

Arrej-206 and 614 Early varieties grown both in dry and irrigated conditions; suitable for the 'Bhal' tract of Gujarat.

N.P.710 Suitable for Gujarat, including Saurashtra.

Bihar

N.P.52 A high-yielding variety; fully bearded, partially resistant to the three rusts under field conditions.

N.P.761 An early variety, fully bearded; grains of good quality; high degree of tolerance to rusts and highly resistant to the loose smut disease; has a good record of yield.

N.P.798 A high yielding early maturing variety; beardless; with amber coloured grains; highly resistant to stem rust and loose smut; suited for north and south Bihar.

N.P.799 Similar to N.P.798 in its character.

WHEAT NEEDS TO BE SOWN IN TIME

Wheat is best sown by the last week of October. You can, however, continue sowings till the middle of November depending on the weather and soil conditions. If you delay the sowings further, however, wheat yields will go down.

The amount of seed to be sown per acre depends on a number of conditions. If sowing is timely, the soil is highly fertile and the variety of wheat you sow will produce large number of tillers, then use a low seed-rate.

In the case of early-maturing varieties and when the sowing is delayed, use a higher seed-rate.

Usually, 60 to 70 pounds of seed is sufficient for sowing an acre.

WHEAT NEEDS SOWING IN LINES

Sow the seed in lines to get good results. You can sow the seed behind the plough or with a seed-drill or cultivator. This will not only ensure better germination and stand of crop, but also cuts down the cost of inter-cultural operations. If you sow in furrows, run a plank over the field. Sowing seeds behind the plough is best done where there is sufficient moisture in the soil or irrigation is available.

When you sow with a seed-drill or a cultivator, you will be reducing the cost of sowing. You can drill seed by dropping the seed into a bamboo or metal tube fastened behind the plough or with a regular seed-drill.

WHEAT NEEDS WATER

Usually, wheat needs two to four irrigations, depending on the season and the soil type..

If the soil does not have sufficient moisture before sowing, give a good irrigation.

If there is enough moisture in the soil at the time of sowing, give the first irrigation after about five to six weeks of sowing.

Give the second irrigation when the wheat plants have elongated to two or three internodes. During this time the plants grow rapidly and need more water.

Give the third irrigation in February or March when the crop is in the milk stage.

WHEAT NEEDS INTERCULTURE

Interculture is necessary to get a good wheat crop. Weeds, especially in poorer soils, rob you of a richer harvest. So weed out the wheat fields thoroughly three or four weeks after sowing.

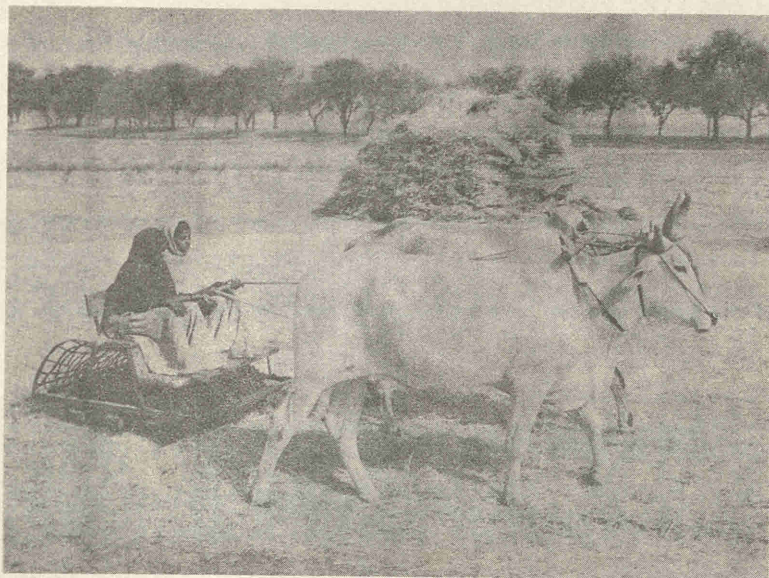
When wheat plants lodge, you will get a poor yield and a low quality grain. You can, however, prevent the lodging, if you

- * Use an improved variety of seed
- * Apply phosphate as recommended
- * Avoid irrigating wheat at the time of tillering
- * Clip the plants at an early stage of their growth, if yours is a very fertile land.

Rogue out all undesirable and smutted plants from time to time.

WHEAT NEEDS TO BE HARVESTED IN TIME

Harvest the crop when the straw has turned yellow and the grain has become hard and brittle. Too much delay in harvesting may result in a part of the yield being lost.



Thresh wheat with an Olpod thresher. Threshing is easier, quicker and cheaper that way than with bullocks alone.

For any further information or help contact your nearest Agricultural Officer or Gram Sevak.

OTHER LEAFLETS PUBLISHED

Treating Seed Before Sowing	Price 10 nP
Kill The Rat	Price 10 nP
Protect Your Soil	Price 10 nP
Compost is Easy to Prepare	Price 10 nP
Green Manuring	Price 10 nP
Control Loose Smut and Earcockle of Wheat	Price 10 nP
Better Implements for a Better Rice Crop	Price 10 nP
How to Treat Paddy Seed	Price 10 nP
Better Level and Bund your Field	Price 10 nP
How to Use Fertilizers	Price 10 nP
Controlling Paddy Pests & Diseases	Price 10 nP
Facts about Fertilizers	Price 10 nP
Papaya is Easy to Grow	Price 10 nP
Drumstick the year-round Vegetable	Price 10 nP
