



1. The ing.



height is ready for plat- the browned leaf.



with 30cm and more one by one, and remove instruction photo, put ing trench.

best seedling 2. Un-bundle the seedlings 3. Following the above 4. After the seed harvest, cut back to 20cm length and use for the rejuvenated seedling. If it is from seed, do the seedling into plant- not need to cut short.

6

## Cultivation

1. Mix-crop as a companion plant.



#### 2. Do not stay water in the field.



Bunching onion is very strong against dryness, but weak in paddy soil condition. Do not stagnate water in the field.

Bunching onion has

repellent effect for pre-

vention of some pests, so

mix-plant with other

vegetables as good com-

panion plant.

3. Grow under snow and taste better.



Bunching onion has cold tolerance. nigh Even in snowy areas, this plant survives and tastes good.

### 4. Top-dress & earth-up.



Especially the single tiller type require earthing up every month. Top-dress is needed both for the single and the multi tiller type every month.

#### 5. Plant ash / dolomite are necessities.

For preparing suitable soil condition (pH 6.0-6.5), plant ash or dolomite application is highly recommended for the rust disease control.

### 6. Self-produced seed.

Enough cold temperature (10°C or less + 30 days and more) encourages flower bud formation. You can harvest the seed for the next season.

# Major disease Green onion rust This disease usuallv

shows on cool days in March to April or around October. Additionally, rain fall enhances the appearance.

Counter measure: Remove the diseased plant and the residues from the planting field. Scatter plant ash (once a week)/ dolomite (once 2 weeks) powder on the leaf lightly, not too much.



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Agriculture Research and Development Cente **Bajo Wangdue Phodrang** 

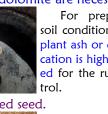
# Bunching onion

## Starter Guide

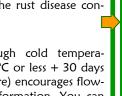
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Department of Agriculture, Ministry of Agriculture and Forests

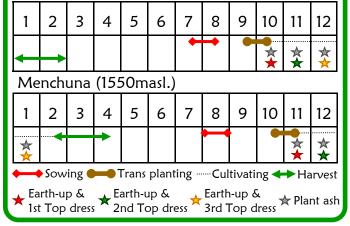
### Points of techniques

## Remarkable characteristics

Bunching onion growers should remember the following remarkable characteristic of bunching onion before starting the cultivation.

- 1) Bunching onion plant has high cold tolerance surviving under snow fall. And the onion also shows a strongness in dry condition.
- 2) But, bunching onion plant does not prefer heavy/paddy-like soil. Do not stagnate water in the field.
- 3) Earth up and top-dress every month for the good production.
- 4) Plant ash or dolomite work well for the plant growth. Scattering plant ash/dolomite is highly recommended to control soil condition (pH 6.0-6.5).
- 5) Bunching onion is one of good companion plants to repel some pests & diseases by mix-planting to some plants such as brinjal, tomato, cucumber, water melon, pumpkin, strawberry and so on.

Major work calendar Bajo (1200masl.)



## Multi tiller & Single tiller

Bunching onion is divided into two types: multi tiller type and single tiller type. The multi type is typified by "Kujyo" variety. This variety can not only be propagated by seeds only, but also by tillers as vegetative propagation. Using this character, "Kujyo" can be propagated continuously without complicated work such as seed production and nursery raising. The other one, the single tiller type has some varieties such as "Kaga" & "Shimonita" are propagated through seed. These bunching onion have high cold tolerance, especially a single tiller type can grow while snowing and the taste gets better and sweeter.

