# Rice isn't so delicious because of global warming? —Looking into Causes and Solution from Rice Planting Season—



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# What is "delicious rice"?

According to Ministry of Agriculture, Forestry and Fisheries delicious rice is

- being cooked beautifully
- soft texture
- moderate hardness and stickyness

# **Elements of rice**



- amylose and amylopectin
- relationship with rice hardness
- the lower it is, the stronger the stickiness
- 2 Protein
- hindered the absorption of moisture
- the less it is, the more soft texture
- 3 Moisture
- within 16%, the higher the better

# Problem

effect of high temperature

What is "immature grain"?

- the percentage of immature grain are increasing



Fat, 6.1 Other, 0.4

Protein 15.5

Starch, 77.

Per 100g of white rice

Moisture 0.9

- incomplete starch development
- looks white due to diffuse light
- occurs when temperature are too high in the early to mid-ripening period
- down the grade because of breaking into pieces easily
- will be soft easily
- decrease the amount of shipments

# It's important to decrease immature grain.

#### Chart 1

Solar calendar	Lural calendar	Days passed
6/6	芒種	
9/2~7	禾乃登	88
10/3~7	水始涸	35
Farming	From sowing	Days passed
rice planting	35	
rice tiller	125	90
harvesting	150	35

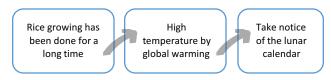
The number of days passed for each of the 72 seasons of the lunar calendar

= The number of days passed between sowing and working

#### Measures

- 1 making nitrogen in the best condition
- 2 controlling the amount of grains
- 3 putting off rice planting
- in order to avoid high temperature at grain filling

## The main measure is putting off rice planting.



### [the reasons]

- obeying the renal calendar, rice plants in Boushu
- around July 6
- considering the season of rice planting, rice tiller, and harvesting, its better to grow rice as chart 1

# How to spread delicious rice?

full-time farmer

- can look for taste of rice
- to do some measures now

but

part-time farmer

- the season of farming is always fixed ex. rice planting : GW

harvesting : late September

### Rice planting in GW is too early.

It's necessary to tell the part-time farmers that it's too early to plant rice in GW if they want to grow delicious rice.

# Conclusion

At the moment, I couldn't draw conclusion when part-time farmers plant rice is best. In my graduate research, I hope to draw conclusions, and spread it to part-time farmers so that everyone can eat delicious rice.