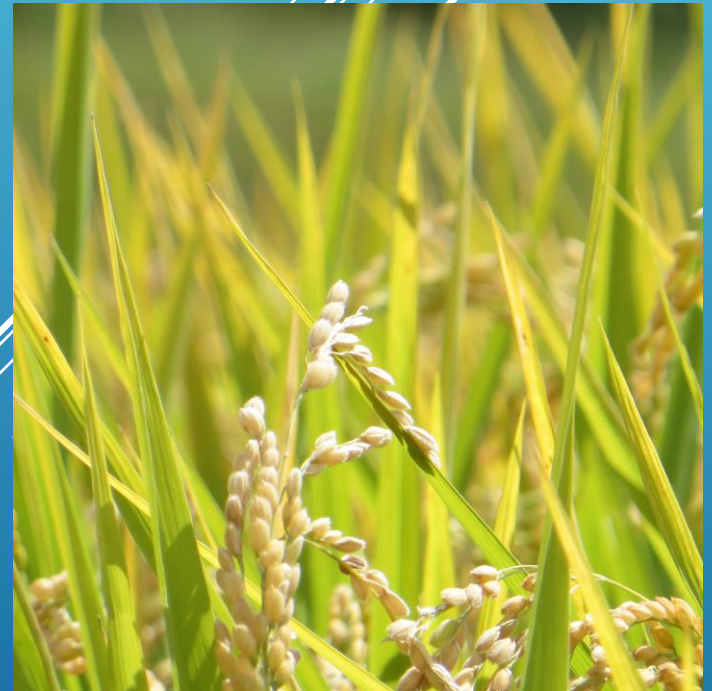


RICE AND SAKE

Staple food and typical alcohol drink in Japan



Type of Rice



Genotype	Japanese rice (Japonica)		Indian rice (Indica)
	Short and roundish grain, less aromatic		Long and slender grain, aromatic
	Non-glutinous rice (ordinary rice)	Glutinous rice (sticky rice)	
	15-30% amylose 70-85% amylopectin	100% amylopectin (recessive gene: waxy gene)	23-31 amylose 69-77% amylopectin
	Steamed moist rice, Senbei (rice cracker)	Rice cake, Sekihan, Okaki Arare (fried rice cake)	Cooked as fluffy rice
	Sake	Mirin	Awamori, Lao-khao, Handia
	Koshihikari, Yamada-Nishiki	Kogane-Mochi, Himeno-Mochi	Basmati, Jasmine
Color	White		Colored (black, red)

Rice data in Japan

Cultivated area	1.469 million ha	33.6% of cultivated land, 3.9% of total area
Production value	1.74 trillion Yen	15.3% of Agriculture productions, 0.17% of GDP
Production volume	7.762 million ton	12 th in the world, 1.4% of world production, 1 st China
Yield	6.83ton/ha	14 th in the world, 1 st Australia (Husked rice)
Self-sufficiency ratio	97%	38% total self-sufficiency ratio (calorie base calculation)

Trivia of rice

Question	Answer
How many grains are produced from 1 rice/?	500-1000 grains produced from 1 grain.
How many grains in a rice cup?	3000-4000 grains in a cup
How much the price of rice?	3000-10000 yen/10kg 20-65 yen/1 cup
How much Japanese eat rice in average?	53kg/person (118kg/person in 1962)

Growing cycle of rice

April	May	June to August	September
Preparing seedlings	Transplanting	Growing in Paddy	Harvest



Japanese Sake

	Material	Saccharification	Fermentation	Remarks
Sake	Rice (starch)	Koji (mold) added to steamed white rice	Yeast	Saccharification and Fermentation, in parallel
Beer	Barley (starch)	Wort produced from malted barley	Beer Yeast	Saccharification and Fermentation, in separate
Wine	Grape (Glucose)	-	Wine Yeast	Saccharification in not necessary

Japanese Sake

Junmai	Honjozo
Junmai is brewed using only rice, water, yeast, and koji —no additives, such as sugar or alcohol.	Honjozo contains a small amount of distilled brewers alcohol to smooth out the flavor and aroma.
Ginjo	Daiginjo
Polished to 60% or less remaining	Polished to 50% or less remaining