

System of grading of 20 Mycological characters.

Grades		1	2	3	4	5	6	
Color of old slant culture (1)		Brown		Brown with green			Green	
Diameter (mm) of colony at 34°C (2)		20-30	30-40	40-50	50-60	60-70	70-80	
Colony	Reverse side	Wrinkling (3)	- plane	+ faint	++	+++	++++	+++++ evident
		Color (4)	- colorless	+ faint	++	+++	++++	+++++ deep
	Sclerotium (5)		- absence	+ few	++	+++	++++	+++++ abundant
Roughness of stalk (6)		- smooth	+	++	+++	++++ coarsely rough	+++++ coarsely rough	
Length of stalk(mm) (7)		0.2-0.6	0.6-1.2	0.8-1.4	1.2-1.8	1.6-2.8	3-6	
Diameter of vesicle(μ) (8)		6-15	15-25	20-30	25-35	30-40	40-80	
Roughness of conidia (9)		- smooth	+	++	+++	++++ echinulate to tuberculate	+++++ echinulate to tuberculate	
Diameter of conidia(μ) (10)		3-4	4-5	5.2-5.6	5.8-6.2	6-7	7-10	
Ratio (%) of biseriate sterigmata (11)		- under several %	+ several %	++ over several %	+++ 20%	++++ 40%	+++++ over 60%	
Production	Kojic acid (12)	- none to negligible	+ trace *	++	+++	++++	+++++ much	
	Pigments (13)							
	Aflatoxins (14)							
	Amylase (15)							
Coloration of hydroquinon (16)		- uncolored	+ faint	++	+++	++++	+++++ dark red	
Reduction of Methylene blue (17)		- over 24hr	+ 20hr	++ 9hr	+++ 6hr	++++ 3hr	+++++ under 1hr	
Browning of rice koji (18)		- none	+ faint	++	+++	++++	+++++ black	
Color of conidia	MCA-medium(19)	- none	+ pale pink	++	+++	++++	+++++ dark pink	
	MCH-medium(20)							

*sometimes showing some spots on Thin-layer chromatogram and UV-absorption spectra similar to those of aflatoxins, being unstable.

(Murakami H, Classification of the Koji Mold., *J. Gen. Appl. Microbiol.*, **17**, 281 (1971))