

CSP – 9 AMA MACHINE DRESSED MUNGBEAN STANDARDS**NOTE: THESE STANDARDS ARE VALID FOR THE 2017/18 SEASON ONLY.**

Quality Parameter	Mungbean Grades –				
	Sprouting	Premium	No. 1	Processing	Manufacturing
Variety	Berken, Crystal, Satin II, Regur	Green Diamond, Celera	Berken, Crystal, Jade-AU, Satin II, Regur, Green Diamond, Celera	Berken, Crystal, Jade-AU, Satin II, Regur, Green Diamond, Celera	Berken, Crystal. Jade-AU, Other varieties sale by sample.
Appearance	Equal to or better than the appearance of the standard sample and in conjunction with the photographic charts and parameters. This is equal to or better than the No. 1 grade standard sample. Regur ONLY: The standard sample has an even appearance but 0.5% brown is acceptable.	Equal to or better than the appearance of the standard sample and in conjunction with the photographic charts and parameters.	Equal to or better than the appearance of the standard sample and in conjunction with the photographic charts and parameters. The standard sample has a brighter appearance than 'Processing' and colour will be more uniform.	Equal to or better than the appearance of the standard sample and in conjunction with the photographic charts and parameters.	Equal to or better than the appearance of the standard sample.
Purity	99% 0.3% other seeds. Max. soil/stone content 0.1%	99% 0.3% other seeds. Max. soil/stone content 0.1%	99% 0.5% other seeds. Max. soil/stone content 0.1%	99% 0.5% other seeds. Max. soil/stone content 0.1%	99% 0.5% other seeds. Max. soil/stone content 0.1% 2% splits allowable.
Size Range (2mm)	98% 75% must be in 0.8mm range	98% 75% must be in 0.8mm range	98% 75% must be in 0.8mm range	NA	NA
Moisture	12%	12%	12%	12%	12%
Defect type*; refer to photographic charts (Max % by number, as conducted on 300 seeds as presented)					
Pod Scale	3%	3%	3%	12%	NA
Seed Coat	1%	1%	1%	2%	NA
Stained	1%	1%	1%	2%	NA
Wrinkled	4%	4%	4%	12%	NA
Objectionable Material	Nil Tolerance	Nil Tolerance	Nil Tolerance	Nil Tolerance	Nil Tolerance
Germination Excluding hard seeds	90%	NA	NA	NA	NA
Over-soaks	10%	NA	NA	NA	NA
Charcoal Rot	Absent	NA	NA	NA	NA
Salmonella	Not Detected	NA	NA	NA	NA
E Coli	Not Detected	NA	NA	NA	NA
Coli forms	Not Detected	NA	NA	NA	NA
Sprout Test	Suitable	NA	NA	NA	NA

* To be determined in accordance with the applicable defect type chart.

NA: Not Applicable

Explanation of the AMA Standards

1. **All Mungbean covered by these Standards are to be Machine Dressed.**
2. **Appearance;** Based on visual assessment against the standard sample at the time of testing. Appearance is determined on uniformity of colour, shades of colour, insect damage, lustre, brightness of colour, condition of skin coat and any other characteristics that effect appearance. In conjunction with appearance test a photographic chart and parameters are used to determine overall grade. The four parameters of seed coat, stained, pod scale and wrinkled are outlined by photographs to determine sound and defective seeds.
3. **Purity;** By the International Seed Testing Association rules. Prohibited Seeds (nil tolerance) NSW & QLD lists. Nil Fungal bodies allowed
 - a. AQIS standard for soil/stone states that soil should not be superficially obvious
 - b. Manufacturing Grade will be 97% by ISTA but it must have a total purity of 99% of mungbean material.
4. **Size Grading;** 98% must be within a 2mm range based on slotted sieves and within this range 75% must be within 0.8mm. (Seed size will be recorded on the certificate).
5. **Moisture;** By International Seed Testing Association rules.
6. **Defect Type;** Photo graphic charts are to be used in conjunction with appearance and parameter tests to determine overall grade. The four defect types of pod scale, seed coat, stained, and wrinkled are outlined by the photograph charts to determine sound and defective seeds. The test is conducted on 20 grams and seed is turned as necessary.
7. **Objectionable Material;** Refers to objectionable foreign matter which has the ability to degrade the hygiene, become a food safety issue of concern or has a commercially unacceptable odour.
8. **Germination;** By the International Seed Testing Association rules. Hard seed to be reported. Hard seeds not to be counted as germinable seed (excluded) for varieties Berken, Delta Emerald and Satin. There is no hard seed limit for Regur, Celera or Green diamond.
9. **Over-soaks;** Percentage of Mungbeans which imbibe after submerging in water at 32 degrees for one hour.
10. **Charcoal Rot;** Presence of Charcoal Rot tested at 28 degrees for 4 days.
11. **Microbiological Standards;**
 - a. E.coli < 10/g
 - b. Coli forms < 103/g
 - c. Salmonella Nil/25g
 - d. If less than tolerance 'Not Detected' is to be reported
12. **Sprout Test;** As per AMA approved procedures.
13. **Lowest grade of any one of the above tests will be the overall grade given.**
14. **Below manufacturing grade is "Sale by Sample".**