

# DNA Extraction from Rice Grain

## Kogene Biotech Co – South Korea



### CONTEXT

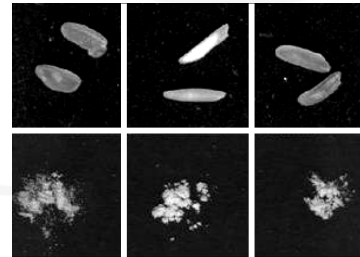
Rice is a key element of the Korean food. Due to Korean regulations, the rice species need to be defined and evaluated. Therefore, DNA qualification and classification are essential.

In this study, a rice grain specie is identified using Precellys<sup>®</sup>24 vs. mortar.

### RESULTS

#### Grinding efficiency:

Rice grains of 3 species were grinded into fine powder following the protocol described



Precellys<sup>®</sup>24 reduces into powder any species of rice grain in 1 minute

### MATERIAL

- Precellys<sup>®</sup>24
- Precellys<sup>®</sup> kit metal bead
- Sample : 1 grain rice - dry
- Without buffer

### PROTOCOL

Precellys<sup>®</sup>24 parameters:  
 6000rpm, 2x30s, 20s break

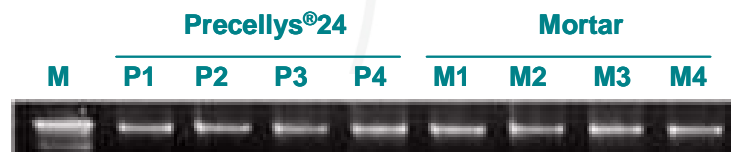


Rice (*Oryza sativa* L.)

#### DNA analysis:

Rice grains (*Oryza sativa* L.) were grinded by Precellys<sup>®</sup>24 and a mortar.

DNA was extracted and loaded directly onto an agarose gel after PCR amplification. Both Precellys<sup>®</sup>24 and mortar are efficient to extract a good quality of DNA. The DNA quantity from rice grains grinded by Precellys<sup>®</sup>24 (P1, P2, P3 and P4) are similar to the result with a mortar (M1, M2, M3 and M4).



Precellys<sup>®</sup>24 gives a faster, easier and more consistent sample preparation with results as efficient as mortar



### CONCLUSION

Every rice species on Korean market must be classified via DNA analysis. We compared use of Precellys<sup>®</sup>24 vs. mortar and obtained similar PCR results with Precellys<sup>®</sup>24. However, it takes lots of time and labor work with mortar preparation (1 prep in 10 minutes). We are satisfied with the results of Precellys<sup>®</sup>24 in terms of reproducibility, time and labor saving (up to 24 preps per minute).

For more details, please contact [precellys@bertin.fr](mailto:precellys@bertin.fr)