



GRINDING VARIOUS TYPES OF SAMPLES WITH THE GK60 PRECELLYS® LYSING KIT

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CONTEXT

Many laboratories prepare different types of samples at the same time and would like one standard, unique kit for all sample types. The aim of this study was to evaluate the grinding efficiency of the GK60 kit on various kinds of samples (animal tissues, plants and seeds) and to compare this result with a competitor matrix.

These experiments have been performed on liver, leaves and rice.

MATERIALS

- Precellys® Evolution homogenizer
- Precellys® Lysing kits: GK60_2mL (cat.no.: KT03961-1-015.2) and Competitor M (comprised of garnet flakes and a 6.0mm ceramic bead)
- Samples: liver, basmati rice and leaf
- Buffer: distilled water

PROTOCOL

Protocol for **rice grinding**:

- 200 mg of rice in each tube
- 7500 rpm, 2 cycles of 30s with 30s break

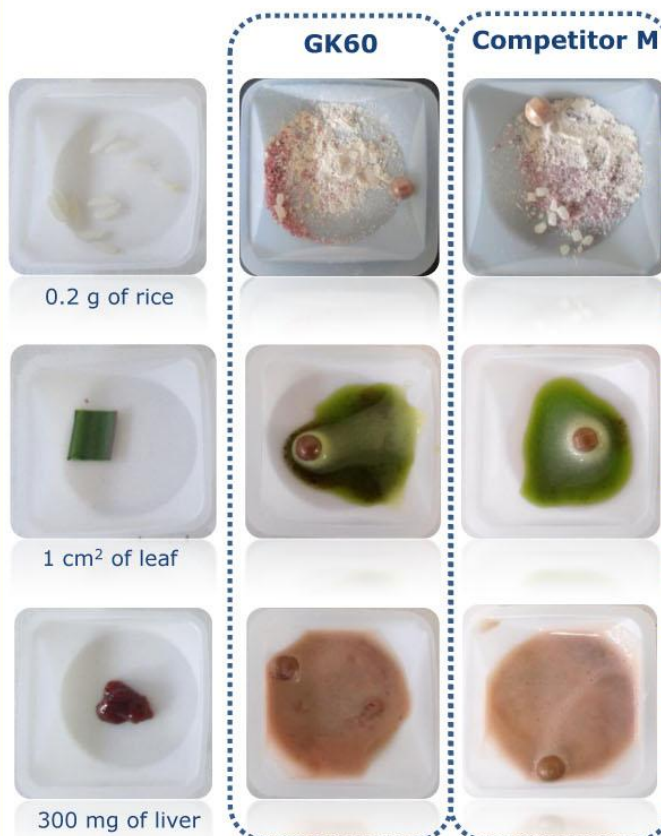
Protocol for **leaf grinding**:

- A piece of leaf (about 1cm²) with 1 mL of buffer in each tube
- 8200 rpm, 2 cycles of 30s with 30s break

Protocol for **liver homogenization**:

- 300 mg of liver with 1 mL of buffer in each tube
- 6500 rpm, 1 cycle of 30s

RESULTS



The Precellys® lysing kit GK60 grinds soft and hard samples with and without buffer. All samples were effectively pulverized or homogenized, and the grinding efficiency was better than Competitor M for rice.

CONCLUSION

The Precellys® Evolution combined with the Precellys® lysing kit GK60 offers a quick and very efficient solution for preparation of various sample types. The GK60 kit grinds and homogenizes soft and hard samples with great efficiency, and provides better results than Competitor M, particular when processing hard samples.

03712-810-DU107