

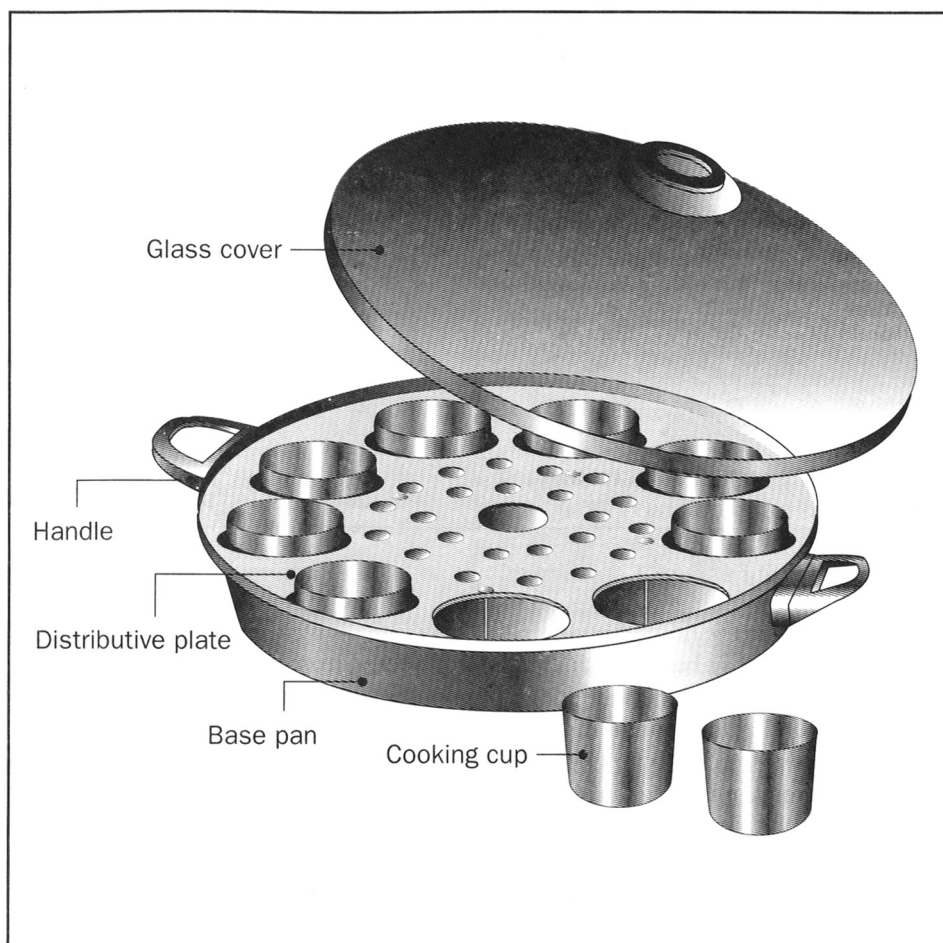
Grain quality

Multisample rice cooker for evaluating eating quality

Hae Yeong Ryu, Crop Experiment Station, Rural Development Administration, Republic of Korea

Preparing cooked rice of several varieties or breeding lines to evaluate their eating quality characteristics is a difficult task. The error across samples is often high because each test entry must be cooked separately, usually at different times and using different apparatuses. To reduce this error, we developed a special cooker that uses indirect heat through water to subject the samples to the same conditions (see figure). One unit can cook nine samples simultaneously. This cooker may also be used to test the quality of small samples or samples from a single plant.

Grains and the appropriate amount of water are placed in the cooking cup. The base pan is filled with water to provide indirect heat for cooking. Cooking is done in two stages: first with water in the base pan for 20 min, then by removing the water and applying direct heat to the rice cups for 5 min. With two units, the cooking process of many samples can be continuous, with one having water in the base pan and the other without. About 120 samples can be evaluated in 1 d using two units. ■



Multisample rice cooker.

Njavara: a unique rice race of the humid tropics

M. V. Menon and N. N. Potty Agronomy Department, College of Horticulture, Vellanikkara, Thrissur 680654, Kerala, India

Njavara is a unique land race of rice valued for its medicinal properties. It is used in treating circulatory, respiratory, and digestive ailments in ayurvedic medicine.

We conducted an experiment to investigate the types of amino acids and the amounts of each in Njavara grain of the black-glumed and golden-glumed grain types grown under rainfed upland and lowland cropping situations compared with the commonly grown traditional variety PTB20 during 1994-96 (see table). The black-glumed type had 192% more free amino acid content and the golden-glumed type 16% more than that of

PTB20 grown in the lowlands. The land race's medicinal property appears to be attributable to the sulfur-containing amino acid, methionine, which is involved in the metabolic pathway of the biosynthesis of thiamine (Vitamin B₁), the deficiency of which causes beriberi. Black-glumed Njavara is richer than pulses in free amino acid content, entitling it to be called a proteinaceous cereal. ■