

Title Effect of Degree of Polish on Cooking Quality and Proximate Composition of Barnyard Millet
Author Lohani U.C., Pandey J. P.
Citation Proceedings: Abstract Summary, International Conference on Agricultural, Food and Biological Engineering & Post Harvest/Production Technology, Sofitel Raja Orchid Hotel, Khon Kaen, Thailand, 21-24 January 2007. 204 p.
Keywords Barnyard millet; Hydration capacity; Cooking time; Protein; Crude fat; Crude fibre.

Abstract

Barnyard millet (*Echinochloa frumentacea*) is commonly grown millet in Uttaranchal state of India. In hilly areas of Uttaranchal, it is popular as *Banti*, *Madira* and *Jhangora* and in Tarai belt, it is familiar by the name of *Sanwa*. Dehusked barnyard millet grain is cooked like rice to make *jhangora bhath*, *chencheda*, *kheer* in all Kumaoni and Garhwali households. Experiments were conducted to study the cooking qualities and proximate compositions of barnyard millet (VL-172) at four moisture levels (8, 10, 12 and 14%, db). The hydration capacity (0.37-0.53 mg/kernel) and swelling capacity (0.30-0.44 μ l/kernel) of milled barnyard millet increased linearly, while the cooking time of millet decreased with the increase in milling time at each experimental moisture levels. The hydration capacity increased by 0.0819, 0.0814, 0.0871 and 0.0924 g/g kernel whereas swelling capacity enhanced by 0.1178, 0.1148, 0.1205 and 0.1330 μ l/kernel from 0 to 20% degree. of polish at 8, 10, 12 and 14 percent moisture levels respectively. The cooking time of milled barnyard millet decreased from 8 to 5 min at 8 and 10 percent moisture levels and from 7 to 5 min at 12 and 14 percent moisture levels respectively with the increase in degree of polish. The protein, fat, ash and fibre of milled barnyard millet were negatively linearly correlated with the degree of polish, while the carbohydrate showed the positive correlation with degree of polish.