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Reducing the Cooking Time of Bambara Groundnut (BGN)

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Abstract : Cooking Bambara groundnut (Bambara beans) is time and energy-consuming. Over time, some substances have been used to help reduce cooking time and save energy. This experimental study was carried out to find ways of reducing the cooking time of Bambara groundnut using selected organic substances. Twenty grams (20g) each of fresh pawpaw leaves, guava leaves, ginger, onion, and palm kernel were cooked with five samples of 200g of the creamy variety of raw Bambara groundnut. A control was cooked without any organic substance added. All six samples were cooked with equal quantities of water (4L); the gas mark used for cooking the samples was marked 5, the highest for the largest burner, using the same cooking pot. Gas matter. The control sample used 192 minutes to cook thoroughly. The ginger-treated sample (AET02) had the shortest cooking time of 145 minutes, followed by the onion-treated sample (AET05), with a cooking time of 157 minutes. The sample cooked with Palm kernel (AET06) and Pawpaw (AET04) used 172 minutes and 174 minutes, respectively, while sample AET03, cooked with Guava, used 185 minutes for cooking. The difference in cooking time for the sample treated with ginger (AET02) and onion (AET05) was 47 minutes and 35 minutes, respectively, as compared with the control. The comparison between Control and Pawpaw produced [$p=0.163>0.05$]; Control and Ginger yielded [$p=0.006<0.05$]; Control and Kernel resulted in [$p=0.128>0.05$]; Control and Guava resulted in [$p=0.560>0.05$]. The study concluded that ginger and onions comparatively reduced the cooking time for Bambara ground nut appreciably. The study recommended that ginger and onions could be used to reduce the cooking time of Bambara groundnut.

Keywords : cooking time, organic substances, ginger, onions, pawpaw leaves, guava leaves, bambara groundnut
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