Bulrush millet or finger millet was substituted for maize at 0, 20, 40 or 60% in both broiler starter and finisher feeds. The chicks fed on the bulrush millet diets had the highest overall bodyweight gain of 1649 g per chick at 55 days. Performance on the finger millet diets was comparable to that on maize. In view of the higher protein content in the bulrush millet tested, subsequent experiments were conducted to determine the value of using bulrush millet not only as an energy source, but also as a part substitute for protein supplements in broiler diets. The bulrush millet included at 70% was shown to effectively replace part of the vegetable protein supplement provided the diet was supplemented with up to 0.3% lysine.