



**RESEARCH ARTICLE :**

## Characterization of parents and F<sub>1</sub> seeds of rice hybrid KRH-4 using different chemical tests and seed image analyzer

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**SUMMARY :** Investigations were carried out to study the varietal characterization of paddy hybrid and its parents through chemical tests and using image analyzer. Among the different chemical tests, phenol and modified phenol test showed differences in which male seeds had no change in colour development whereas, seeds of female and hybrid showed brown colouration. In case of FeSO<sub>4</sub>, KOH and NaOH tests both parents and hybrid showed similar colour reaction. The results obtained through image analysis with regard to seed length and seed width could be useful for varietal characterization of paddy genotypes. Based on seed length both parents and hybrid were grouped as medium length, based on seed width, parents and hybrid were grouped as broad seeds. But based on Seed length/width ratio of seeds, female and hybrid seeds were grouped as elongated seeds whereas, male as semi elongated.

**KEY WORDS :**

Hybrid, Paddy, Colour

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