IRRI THE NUTRITIONAL IMPLICATIONS OF PERICARP COLOR IN PIGMENTED RICE THROUGH MODELING

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HIGHLIGHTS

Pigmented rice with superior nutritional property in terms of phenolics and micronutrients were identified

Modeling techniques were able to classify the samples and relate the pericarp color to anthocyanin content.

Antioxidant and anticancer assays were employed to confirm the health benefit of pigmented rice



flavonoids, and anthocyanins were performed.

Antioxidant and cancer cell assays

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Antioxidant capacity were determined and selected lines were subjected to cancer cell lines.

Modeling techquiues were employed to cluster the samples and infer relationships.



CONCLUSION

Red rice has effective inhibitory effects against colon, liver, and breast cancer cell lines.

Pigmented rice comprises of relatively high content of phenolics, flavonoids, and anthocyanins. Thus, translate to its antioxidant and anticancer properties. Modeling revealed that pericarp color is mosily correlated with anthocyanins. Four clusters were obtained from the nutritional component of pigmented rice.