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Discrimination of Cooked Mochiminori and Koshihikari Rice Grains by Observation of Internal Hollows Using Light Transmittance Photography

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We compared cv. Mochiminori as glutinous rice and cv. Koshihikari as non-glutinous rice using light transmittance photography and clarified that the maximum hollow width/grain width ratios at the hollow (hollow ratio) of Mochiminori and Koshihikari were different. The Mochiminori rice grain had a small hollow ratio or undetectable internal hollows, but the Koshihikari had a large hollow ratio. This agreed with the result by nuclear magnetic resonance micro imaging. In addition, grains from mixed cooking of the two cultivars were identified as Mochiminori or Koshihikari rice using light transmittance photography instead of the iodine dyeing method. The remaining iodine solution and the dyed grain samples were post-treated safely, because the iodine is toxic. Light transmittance photography easily discriminated Mochiminori or Koshihikari rice grains.

Keywords: [light transmittance](#), [internal hollow](#), [Mochiminori](#), [Koshihikari](#)

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