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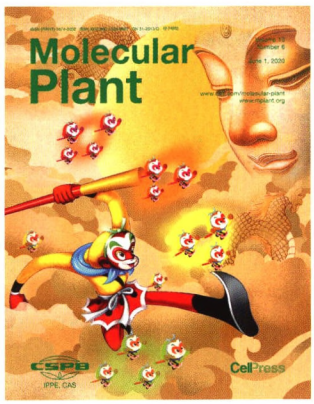

On The Cover

In plants, RNA-directed DNA Methylation (RdDM) is known to play important roles in transposon silencing, gene regulation and antiviral defense. RdDM is iniatiated with the transcription of target sequences by a plant-specific RNA polymerase Pol IV. In this issue, Xu et al. report a critical role of OsNRPD1, the largest subunit of Pol IV, in the regulation of rice tillering, and Zhang et al. report that the targeted degradation of OsNRPD1 triggered by expression of P3, a rice bunyavirus-encoded protein, via the ubiquitin-proteasome system (UPS) is essential for viral pathogenesis. The cover artwork diagrams the confrontation of the Monkey King, a famous Chinese mythological figure, with the Buddha. Hundreds of monkey descendants can be made from the hairs of the Monkey King, resembling functionally diversified small RNAs generated by Pol IV. The Buddha represents the cellular ubiquitin-proteasome system, and the flying dragon denotes P3, a virus virulence protein that functions as a messenger activating UPS to target Pol IV for degradation. Image by: Shanshan Zhao.