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A COMBINATORIAL CHARACTERISATION OF d-KOSZUL AND (D, A)-STACKED MONOMIAL ALGEBRAS THAT SATISFY (Fg)

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Abstract: Condition **(Fg)** was introduced in [**6**] to ensure that the theory of support varieties of a finite-dimensional algebra, established by Snashall and Solberg, has some similar properties to that of a group algebra. In this paper we give some easy-to-check combinatorial conditions that are equivalent to **(Fg)** for monomial d-Koszul algebras. We then extend this to monomial (D, A)-stacked algebras. We also extend the description of the Yoneda algebra of a d-Koszul algebra in [**10**] to (D, A)-stacked monomial algebras.

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Key words: d-Koszul, Ext algebra, Hochschild cohomology, finiteness condition, (D, A)-stacked.