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**Christopher Phan\***, Department of Mathematics, 1222 University of Oregon, Eugene, OR 97403,  
and **Thomas Cassidy** and **Brad Shelton**. *The Yoneda algebra of a monomial  $\mathcal{K}_2$  algebra.*

The Yoneda algebra of a Koszul algebra  $A$  is well understood as the quadratic dual  $A^!$ . We consider the case where the connected-graded algebra  $A$  is a monomial algebra in the more general class of  $\mathcal{K}_2$  algebras introduced by Cassidy and Shelton. In this more general case, the Yoneda algebra has both binomial and monomial relations, which we describe. Furthermore, the Yoneda algebra is not necessarily one-generated and may not be  $\mathcal{K}_2$ . (Received September 16, 2008)