1050-05-101 Gargi Bhattacharyya (gbhattacharyya@ubalt.edu), Liberal Studies, University of Baltimore, Baltimore, MD 21201, Sung Y Song* (sysong@iastate.edu), Department of Mathematics, Iowa State University, Ames, IA 50011-2064, and Rie Tanaka (hrie@webmail.tohoku.ac.jp), Graduate School of Information Sciences, Tohoku University, Sendai, 980-8579, Japan. Terwilliger algebras of wreath products of one-class association schemes.

We discuss the wreath product of one-class association schemes $K_n = H(1, n)$ for $n \ge 2$. We show that the *d*-class association scheme $K_{n_1} \wr K_{n_2} \wr \cdots \wr K_{n_d}$ formed by taking the wreath product of K_{n_i} (for $n_i \ge 2$) has the triple-regularity property. Then based on this fact, we determine the structure of the Terwilliger algebra of $K_{n_1} \wr K_{n_2} \wr \cdots \wr K_{n_d}$ by studying its irreducible modules. In particular, we show that every non-primary module of this algebra is 1-dimensional. (Received February 28, 2009)