998-32-70 **Young Joo Lee*** (yjlee@mokpo.ac.kr), Department of Mathematics, Mokpo National University, Chonnam, 534-729, South Korea, **Boo Rim Choe** (choebr@math.korea.ac.kr), Department of Mathematics, Korea University, Seoul 136-701, South Korea, and **Hyungwoon Koo** (koohw@math.korea.ac.kr), Department of Mathematics, Korea University, Seoul 136-701, South Korea. *Commuting Toeplitz operators on the Bergman space of the polydisk.*

We obtain characterizations of (essentially) commuting Toeplitz operators with pluriharmonic symbols on the Bergman space of the polydisk. We show that commuting and essential commuting properties are the same for dimensions bigger than 2, while they are not for dimensions less than or equal to 2. Also, the corresponding results for semi-commutators are obtained. (Received February 01, 2004)