Finite generation of cohomology rings of some pointed Hopf algebras in positive characteristic. Preliminary report.

It is a long standing conjecture that the cohomology ring of a finite-dimensional Hopf algebra is always finitely generated. So far affirmative answers for noncommutative and noncocommutative Hopf algebras are given in a case by case basis. In this talk, over a base field of characteristic p>2, we prove the cohomology rings of the bosonization of the rank 2 Nichols algebra of Jordan type over a cyclic group of order p and their liftings in p=3 are finitely generated. We will apply the twisted tensor product and Anick resolutions to achieve that goal. (Received September 20, 2017)