Abstract

Let $\Bbbk$ be an algebraically closed field of characteristic 0 and let $\mathbb{D}_m$ be the dihedral group of order $2m$ with $m = 4t, t \geq 3$. We classify all finite-dimensional Nichols algebras over $\mathbb{D}_m$ and all finite-dimensional pointed Hopf algebras whose group of group-likes is $\mathbb{D}_m$, by means of the lifting method. As a byproduct we obtain new examples of finite-dimensional pointed Hopf algebras.