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Harsh A Mehta*, hmehta@math.sc.edu. *Malle's conjecture on Frobenius groups.*

We let a group G act on the set of d letters, $[d]$, by the induced left multiplication of action of the symmetric group S_d acting on $[d]$. We attain upper bounds for the number of degree d algebraic extensions K/k with Galois group G as the norm of the discriminant $\mathcal{N}_{k/\mathbb{Q}}(d_{K/k})$ is bounded above by $x \rightarrow \infty$. We attain upper bounds for the number of such extensions for groups of the form $G = F \rtimes H$ with certain conditions on F and H . Malle made a conjecture about what the asymptotic of this quantity should be as $\mathcal{N}_{k/\mathbb{Q}}(d_{K/k}) \rightarrow \infty$. We show that under a conjecture of Cohen and Lenstra, the upper bounds we achieve match the prediction of Malle. (Received July 22, 2018)