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Cagri Karakurt and **Tye Lidman*** (tlid@math.utexas.edu). *Seifert fibered homology spheres and the Heegaard Floer homology botany problem.*

Using work of Némethi and a refinement by Can and Karakurt, we prove that there exists an algorithm to solve the botany problem for Seifert fibered integer homology spheres. That is, given a \mathbb{Z} -graded $\mathbb{Z}[U]$ -module, we show that there is an algorithm to determine which Seifert homology spheres have this module as their Heegaard Floer homology (and in particular, that there are only finitely many such Seifert homology spheres). (Received September 06, 2013)