The Saturation Number of Pineapples

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Given a fixed graph $F$, a graph $G$ is said to be $F$-saturated if it contains no copy of $F$ and the addition of any edge creates a copy of $F$. The minimum number of edges that an $F$-saturated graph on $n$ vertices can have is the saturation number of $F$. We determine the saturation numbers for a class of graphs called pineapples, denoted $\Pi_{s,t}$, formed by taking a complete graph $K_t$ and adding $s$ pendant edges to one of its vertices.

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