Shanta Laishram and Florian Luca Fibonacci numbers of the form $x^a \pm x^b \pm 1$, Fibonacci Quart. **52** (2014), no. 4, 290–295.

Abstract

In this paper, we show that the Diophantine equation $F_n = x^a \pm x^b \pm 1$ has only finitely many positive integer solutions (n, x, a, b) with $n \ge 3$, $\max\{a, b\} \ge 2$ and x with exactly two distinct prime factors.