We consider an elliptic system of the form

\[
\begin{aligned}
-\Delta u &= \lambda f(v) \quad \text{in } \Omega; \\
-\Delta v &= \lambda g(u) \quad \text{in } \Omega; \\
u = 0 = v \quad \text{on } \partial \Omega,
\end{aligned}
\]

where \( \lambda \in \mathbb{R} \) is the bifurcation parameter and \( \Omega \subset \mathbb{R}^2 \) is a bounded, convex domain with smooth boundary \( \partial \Omega \). The nonlinearities \( f, g : \mathbb{R} \to (0, \infty) \) are non-decreasing Lipschitz continuous functions that depend exponentially on \( v \) and \( u \), respectively. We discuss the existence of positive solution for \( \lambda > 0 \) small using bifurcation theory. (Received September 21, 2015)