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1003-35-1265 **Hai Dang** and **Ratnasingham Shivaji*** (shivaji@ra.msstate.edu), Department of Mathematics, Mississippi State University, Mississippi State, MS 39762. .

We consider the system

$$\begin{aligned} -\Delta u &= \lambda f(v); x \in \Omega \\ -\Delta v &= \mu g(u); x \in \Omega \\ u = 0 &= v; x \in \partial\Omega, \end{aligned}$$

where Ω is a ball in R^N , $N \geq 1$ and $\partial\Omega$ is its boundary, λ, μ are positive parameters, and f, g are smooth functions that are negative at the origin and $f(x) \sim x^p$ and $g(x) \sim x^q$ for large x for some $p, q > 0$ with $pq < 1$. We establish the uniqueness of positive solutions when the parameters λ and μ are large.

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