Title: On power integral bases for certain pure number fields

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Let K be a pure number field generated by a complex root of a monic irreducible polynomial $f(x) = x^{12} - m$ with a square free rational integer $m \neq \mp 1$. In this paper, we prove that if $m \equiv 2$ or $3 \,(\mathrm{mod}\,4)$ and $m \not\equiv \mp 1 \,(\mathrm{mod}\,9)$, then the number field K is monogenic. But if $m \equiv 1 \,(\mathrm{mod}\,4)$ or $m \equiv \mp 1 \,(\mathrm{mod}\,9)$, then the number field K is not monogenic.

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