1042-03-41          **Carl G. Jockusch, Jr.*** (`jockusch@math.uiuc.edu`), Department of Mathematics, University of Illinois, 1409 W. Green St., Urbana, IL 61801, and **Damir D. Dzhafarov** (`damir@math.uchicago.edu`). *Ramsey's Theorem and Cone Avoidance.*

Cholak, Jockusch, and Slaman showed in [1] that every computable 2-coloring of pairs has an infinite $\text{low}_2$ homogeneous set $H$. We answer a question raised in [1] by showing that $H$ may be chosen to satisfy the additional condition $C \not\leq_T H$, where $C$ is a given noncomputable set. The proof is based on a simplified proof of Seetapun's theorem that every computable 2-coloring of pairs has an infinite homogeneous set $H$ such that, for all $i$, $C_i \not\leq_T H$, where $C_0, C_1, \ldots$ are given noncomputable sets. We show further that every computable 2-coloring of pairs has two infinite $\text{low}_2$ homogeneous sets whose degrees form a minimal pair.

[1] Peter A. Cholak, Carl G. Jockusch, Jr., and Theodore A. Slaman, On the strength of Ramsey's theorem for pairs, J. Symbolic Logic 66 (2001), 1-55. (Received July 30, 2008)