Decarboxylation of simple carboxylic acids requires very high temperatures, at which the organic product often decomposes. In contrast, β-ketoacids undergo decarboxylation upon warming.

\[
\begin{align*}
\text{R= alkyl, aryl} \\
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eg:

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The molecule of a β-ketoacid is stabilized by an intramolecular hydrogen bond that creates a six-membered ring, allowing the reaction to occur via a relatively stable, six-membered cyclic transition state.

\[
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see also carboxylation

Contributors

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