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# The Reaction of N-Phenyliminoketenylidenetriphenylphosphorane with $\alpha,\beta$ -Unsaturated Carbonyl Compounds. Synthesis of New Pyran Derivatives

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The reaction of N-phenyliminoketenylidenetriphenylphosphorane  $\left[ (\text{C}_6\text{H}_5)_3\text{P}^{\oplus}=\text{C}=\text{N}-\text{C}_6\text{H}_5 \right]^-$  (1), with 2-benzylidene-1,3-indandione (2), 1,2-diphenyl-3,4-pyrazolidenedione (3) and/or 5-benzylidene barbituric acid (4) has been investigated. When ylide 1 was allowed to react with compounds 2, 3 or 4 in THF at ambient temp. the corresponding new pyrano-phosphoranylidenes 5, 6 or 7 were obtained. The elemental microanalyses, IR,  $^1\text{H}$  NMR,  $^{31}\text{P}$  NMR and MS data agree with the structure of the cyclic iminophosphoranes by  $[4+2]$ -cycloaddition and exclude 4-membered ring structure by  $[2+2]$ -cycloaddition. When the Wittig reaction was carried on the pyrano-phosphoranes 5, 6 or 7, using p-nitrobenzaldehyde, the exocyclic olefins together with triphenylphosphine oxide were isolated.

