Give the reactant that would give the following aldol product.

\[
\text{aldol reaction}
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How could the dialdehyde be prepared?

Can the aldol reaction be catalyzed by acid?

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enols are less reactive than enolate ions

more reactive electrophile than:

less reactive nucleophile than:
Why are aldols unstable when warmed in the presence of either acid or base?

Propose a mechanism for the following transformation.

Which alcohol is a likely intermediate in the mechanism?

Which enol is a likely intermediate in the mechanism?

How are the bonds made and broken in the conversion of A to B?
How are the bonds made and broken in the conversion of A to B?

Homework: Outline a synthesis of helminthosporal from the compound shown.
Use your workshop sheets (with the barcode); some of these will be collected Mar 8 and graded for credit!

What is the major product of the following reaction?

Propose a mechanism for the following reaction.

Choose an intermediate in the mechanism of the following reaction.

Propose a mechanism for the following reaction.
Give the aldol product(s) of the following reaction.

\[
\text{aldol reaction}
\]

Choose the aldol product(s) of the following reaction.

\[
A = 1 \quad B = 2 \quad C = 3 \quad D = 4 \quad E = 1 + 4 \quad F = 1 + 2 + 3 + 4
\]

What reactants would give the following aldol?

Can aldol reactions using two different carbonyl compounds be performed?

Can aldol reactions using two different carbonyl compounds be performed?

this is a mess!
What reactants would give the following aldol as the major product?

Why is the following aldol reaction favorable?

Why is the formation of the acetone aldol suppressed?