**Significance:** Mytilipin A is a member of the chlorosulfolipid family of natural products. It was isolated from the mussel *Mytilus galloprovincialis* and is associated with seafood poisoning. In addition to their previous syntheses of other polychlorinated natural products (*J. Am. Chem. Soc.* 2009, 131, 7570; *J. Am. Chem. Soc.* 2010, 132, 2542), the authors describe a short access to mytilipin A.

**Comment:** Dichloroalcohol A was oxidized with DMP and the sensitive aldehyde was directly subjected to a highly diastereoselective allylation with B to give D after basic work-up. cis-Selective metathesis with E yielded G in 30% yield but allowed the synthesis to be finished in only another three steps. In total, (±)-mytilipin A was prepared in seven linear steps and in more than 8% yield. The authors also describe a kinetic resolution of epoxide D, so that an enantioselective synthesis is possible with the same route.