Feeding experiment using C 14, labeled sodium acetate precursors in CuCl2 treated broad beans (Vicia faba) cotyledons have demonstrated that furanoacetylene phytoalexin wyerone is biosynthetically derived from seven intact acetate units. A further experiment using sodium (2H3) acetate indicated the head of the chain. And showed the chain is analogous to that of a fatty acid precursor. Any chain shortening processes from postulated C 18 precursors occurring from the carboxyl end. Incorporations of oleate and linoleate were however, regarded as insufficient to prove the involvement of these compounds during the biosynthesis process.