Detection of VM55599 and Pre-paraherquamide from *Aspergillus japonicus* and *Penicillium fellutanum*: Biosynthetic Implications

SUPPORTING INFORMATION

Yousong Ding,[†] Sabine Gruschow,[†] Thomas J. Greshock,[‡] Jennifer M. Finefield,[‡] David H. Sherman,[†] and Robert M. Williams[,‡,§]*

Center for Chemical Genomics, Life Sciences Institute, The University of Michigan,

210 Washtenaw Avenue, Ann Arbor, MI 48109-2216,

Department of Chemistry, Colorado State University, Fort Collins, CO 80523,

and University of Colorado Cancer Center, Aurora, CO 80045

[*] To whom correspondence should be addressed. Tel: (970) 491-6747. Fax: (970) 491-3944. E-mail: rmw@lamar.colostate.edu.

[†]Center for Chemical Genomics, The University of Michigan.

[‡]Department of Chemistry, Colorado State University.

[§]University of Colorado Cancer Center.

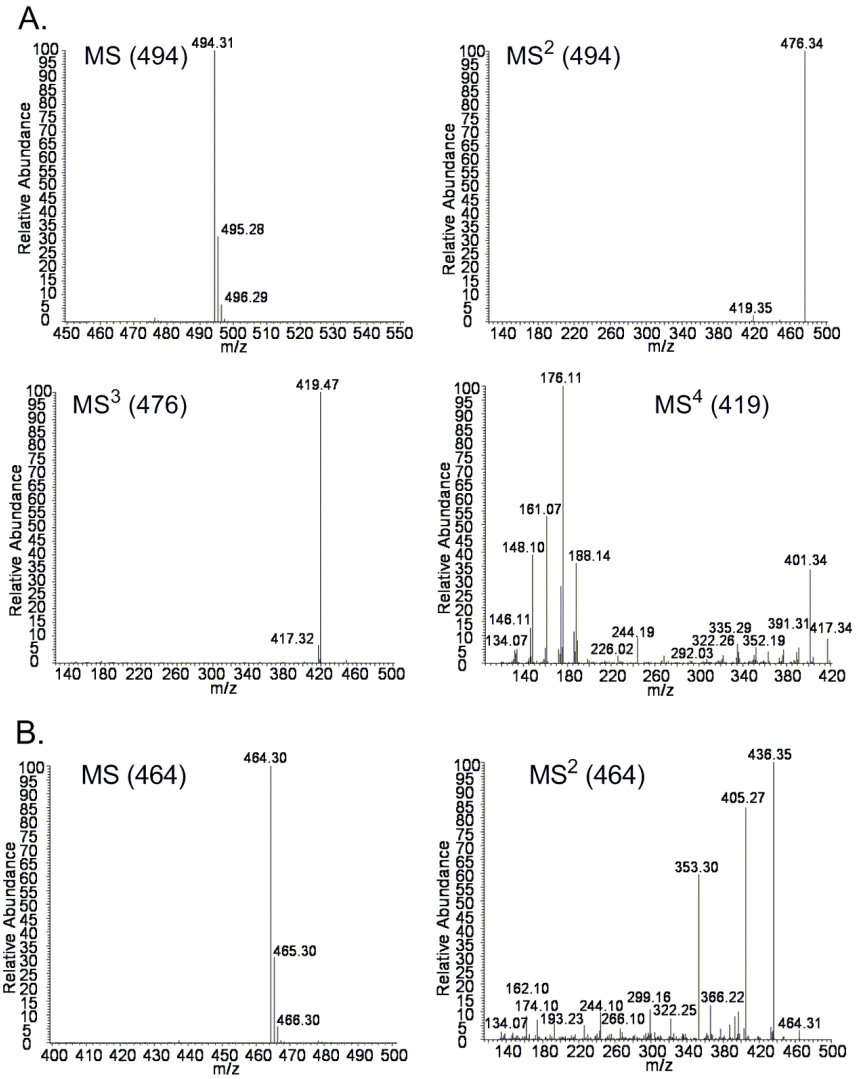

Figure S1. MS^n spectra of authentic paraherquamide A (**6**) (**A**) and authentic paraherquamide B (**B**). These spectra were used to identify both compounds in extracts from isolations of *P. fellutanum* and *A. japonicus* JV-23.

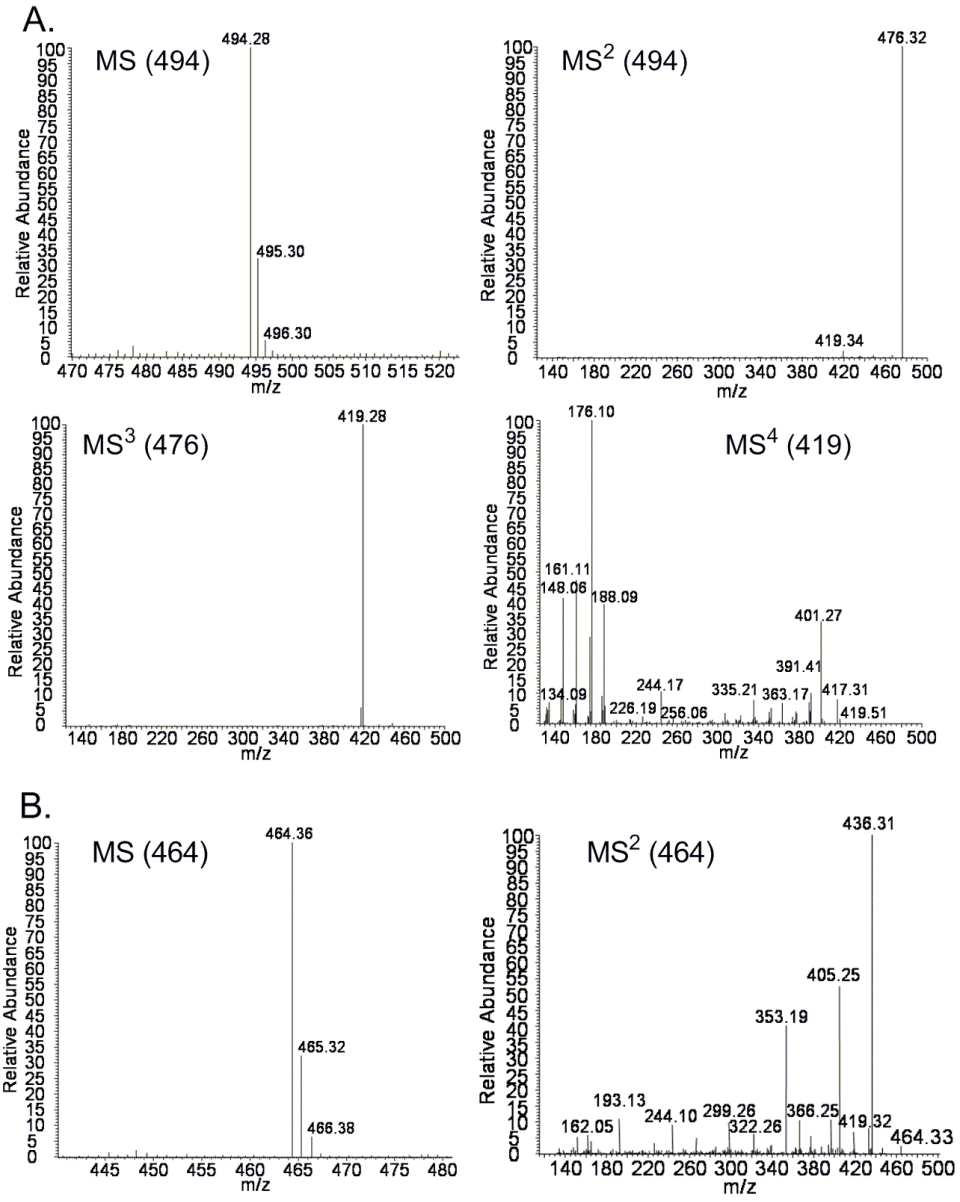

Figure S2. MS^n spectra of two metabolites at 14.45 min (**A**) and at 14.88 min (**B**) from the extract from *A. japonicus* JV-23. These metabolites were identified as paraherquamide A (**6**) (Rt = 14.45 min) and paraherquamide B (Rt = 14.88 min) by comparing their MS^n spectra to those of authentic compounds.

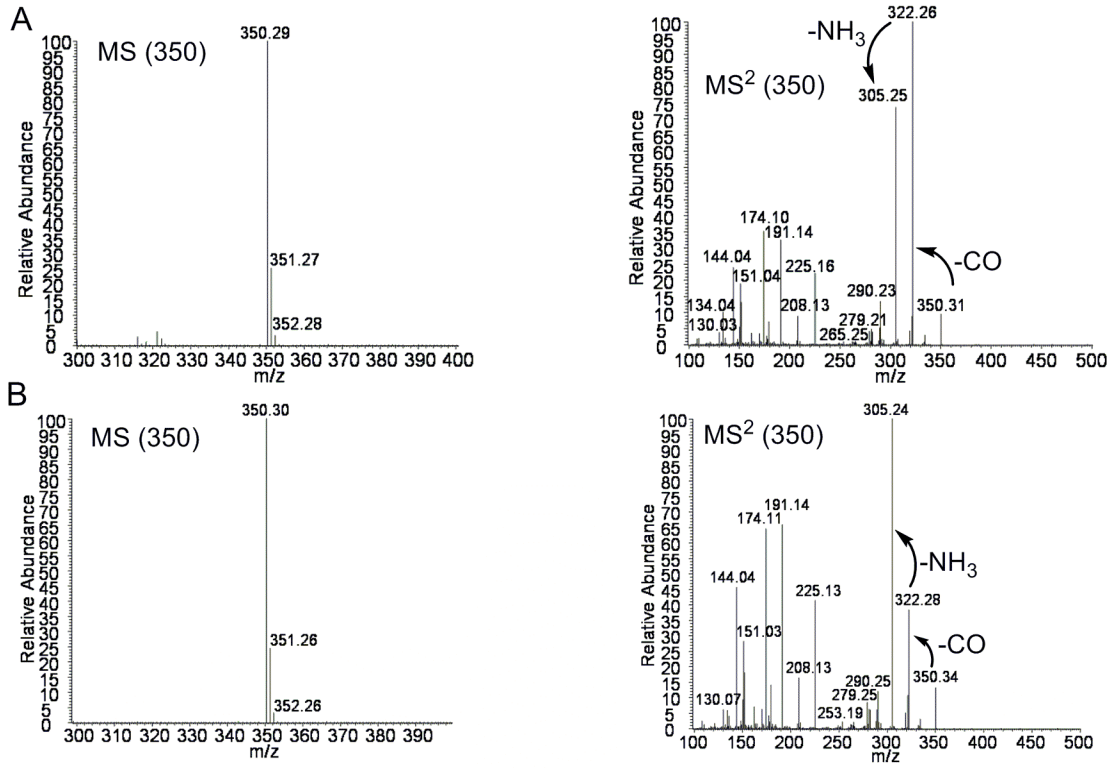

Figure S3. MS and MS^2 spectra of authentic VM55599 (**4**) (**A**) and authentic pre-paraherquamide (**5**) (**B**). These spectra were used to identify VM55599 (**4**) and pre-paraherquamide (**5**) in extracts from isolations of *P. fellutanum* and *A. japonicus* JV-23.