

# Triflic acid-mediated rearrangements of 3-methoxy-8-oxabicyclo[3.2.1]octa-3,6-dien-2-ones: Synthesis of methoxytropolones and furans

Yvonne D. Williams,<sup>†,‡</sup> Christine Meck,<sup>†,‡</sup> Noushad Mohd,<sup>†</sup> and Ryan P. Murelli<sup>†,‡,\*</sup>

<sup>†</sup>Department of Chemistry, Brooklyn College, The City University of New York, 2900 Bedford Avenue, Brooklyn College 11210

<sup>‡</sup>Department of Chemistry, The Graduate Center, The City University of New York, 365 Fifth Avenue, New York, NY 10016

## Supporting Information

### Table of Contents

---

#### 3-methoxy-8-oxabicyclo[3.2.1]octa-3,6-dien-2-ones

6-(4-bromophenyl)-3-methoxy-5-methyl-8-oxabicyclo[3.2.1]octa-3,6-dien-2-one ( <b>4f</b> ).....	s-2
5-(chloromethyl)-3-methoxy-6-phenyl-8-oxabicyclo[3.2.1]octa-3,6-dien-2-one ( <b>4g</b> ).....	s-3
dimethyl 3-methoxy-4-oxo-8-oxabicyclo[3.2.1]octa-2,6-diene-6,7-dicarboxylate ( <b>4i</b> ).....	s-4

#### methoxytropolones

2-hydroxy-7-methoxy-5-methyl-4-phenylcyclohepta-2,4,6-trienone ( <b>6a</b> ).....	s-5
2-hydroxy-7-methoxy-5-methyl-4-(4-nitrophenyl)cyclohepta-2,4,6-trienone ( <b>6b</b> ).....	s-6
ethyl 6-hydroxy-4-methoxy-2-methyl-5-oxocyclohepta-1,3,6-trienecarboxylate ( <b>6c</b> ).....	s-6
4-benzoyl-2-hydroxy-7-methoxy-5-methylcyclohepta-2,4,6-trienone ( <b>6d</b> ).....	s-7
ethyl 6-hydroxy-4-methoxy-2,7-dimethyl-5-oxocyclohepta-1,3,6-trienecarboxylate ( <b>6e</b> ).....	s-7
4-(4-bromophenyl)-2-hydroxy-7-methoxy-5-methylcyclohepta-2,4,6-trienone ( <b>6f</b> ).....	s-8
<i>HMBC and HSQC Spectra and Assignment</i> .....	s-9
4-(chloromethyl)-7-hydroxy-2-methoxy-5-phenylcyclohepta-2,4,6-trienone ( <b>6g</b> ).....	s-10

#### modifications of halogenated methoxytropolones

4-([1,1'-biphenyl]-4-yl)-2-hydroxy-7-methoxy-5-methylcyclohepta-2,4,6-trienone ( <b>7</b> ).....	s-11
4-([1,1'-biphenyl]-4-yl)-2,7-dihydroxy-5-methylcyclohepta-2,4,6-trien-1-one ( <b>8</b> ).....	s-11
(4-hydroxy-6-methoxy-5-oxo-2-phenylcyclohepta-1,3,6-trien-1-yl)methyl acetate ( <b>9</b> ).....	s-12
4-(azidomethyl)-7-hydroxy-2-methoxy-5-phenylcyclohepta-2,4,6-trien-1-one ( <b>10</b> ).....	s-13
2-hydroxy-7-methoxy-4-phenyl-5-((4-phenyl-1 <i>H</i> -1,2,3-triazol-1-yl)methyl)cyclohepta-2,4,6-trien-1-one ( <b>11</b> ).....	s-14

#### furans

dimethyl 2-methylfuran-3,4-dicarboxylate ( <b>12h</b> ).....	s-15
dimethyl furan-3,4-dicarboxylate ( <b>12i</b> ).....	s-15

---





























