

Table S1. Species names, accession numbers and collection location are given for samples used to build the phylogeny shown in Figure 1A. Multiple individuals of a species are listed as independent samples with accession numbers and a numerical suffix appended to the species name. Abbreviations: NP (National Park), SP (State Park).

Sample Name	Accession #	Collection Location
<i>Asobara sp. ABZ3773.1</i>	KR896844.1	Prince Albert NP, SK, CAN
<i>Asobara sp. ABZ3773.2</i>	KR898757.1	Elk Island NP, AB, CAN
<i>Asobara sp. ABZ3773.3</i>	KR886087.1	Elk Island NP, AB, CAN
<i>Asobara sp. ABZ3773.4</i>	KR875914.1	Prince Albert NP, SK, CAN
<i>Asobara sp. ABZ3773.5</i>	KR884238.1	Wellington County, ON, CAN
<i>Asobara sp. ABZ3773.6</i>	KR888074.1	Elk Island NP, AB, CAN
<i>Asobara sp. ABZ3773.7</i>	KR879657.1	Wellington County, ON, CAN
<i>Asobara sp. ABZ3773.8</i>	KR784633.1	Leeds and Grenville, ON, CAN
<i>Asobara sp. ABX5347</i>	JN293161.1	Yoho NP, BC, CAN
<i>Asobara sp. ACE4721.1</i>	JN293665.1	Glacier NP, BC, CAN
<i>Asobara sp. ACE4721.2</i>	JN292450.1	Glacier NP, BC, CAN
<i>Asobara sp. ACR5030</i>	MF936732.1	Gulf Islands NP, BC, CAN
<i>Asobara sp. AAE0947</i>	HQ106668.1	Restigouche, NB, CAN
<i>Asobara sp. ACF3747.1</i>	HQ930298.1	Bigelow, AR, USA
<i>Asobara sp. ACF3747.2</i>	KR896531.1	Wellington County, ON, CAN
<i>Asobara sp. ACF3746.01</i>	HQ929638.1	Deadhorse Ranch SP, AZ, USA
<i>Asobara sp. ACF3746.02</i>	KY843128.1	Islamabad, Pakistan
<i>Asobara sp. ACF3746.03</i>	KY845150.1	Islamabad, Pakistan
<i>Asobara sp. ACF3746.04</i>	KY838943.1	Islamabad, Pakistan
<i>Asobara sp. ACF3746.05</i>	KY830675.1	Islamabad, Pakistan
<i>Asobara sp. ACF3746.06</i>	KY843285.1	Islamabad, Pakistan
<i>Asobara sp. ACF3746.07</i>	KY832326.1	Islamabad, Pakistan
<i>Asobara sp. ACF3746.08</i>	KY842379.1	Islamabad, Pakistan
<i>Asobara sp. ACF3746.09</i>	KY830249.1	Islamabad, Pakistan
<i>Asobara sp. ACF3746.10</i>	KY840132.1	Islamabad, Pakistan
<i>Asobara sp. AsDen</i>	MT498809.1	Denver, CO, USA

Table S2. Species and strain names, accession numbers and collection location are given for samples used to build the phylogeny shown in Figure 1B.

Species Name	Strain Name	Accession #	Collection Location
<i>Asobara sp. ABZ3773</i>	<i>ABZ3773</i>	KR886087.1	Elk Island NP, AB, CAN
<i>Asobara sp. ABX5347</i>	<i>ABX5347</i>	JN293161.1	Yoho NP, BC, CAN
<i>Asobara triangulata</i>	<i>DSZ062</i>	KT835413.1	Yunnan, China
<i>Asobara mesocauda</i>	<i>DSZ061</i>	KT835414.1	Yunnan, China
<i>Asobara rufescens</i>	<i>TK(1)</i>	AB920758.1	Tokyo, Japan
<i>Asobara tabida</i>	<i>AtFr</i>	JQ808428.1	Sospel, France
<i>Asobara citri</i>	<i>AcIC</i>	JQ808423.1	Lamto, Cote d'Ivoire
<i>Asobara leverii</i>	<i>DSZ084</i>	KT835427.1	South Korea
<i>Asobara brevicauda</i>	<i>DSZ066</i>	KT835453.1	South Korea
<i>Asobara persimilis</i>	<i>AperAus</i>	JQ808425.1	Sydney, Australia
<i>Asobara elongata</i>	<i>DSZ048</i>	KT835452.1	Yunnan, China
<i>Asobara japonica</i>	<i>AjJap</i>	JQ808424.1	Tokyo, Japan
<i>Asobara rossica</i>	<i>A_rossica</i>	AB456708.1	Hokkaido, Japan
<i>Asobara pleuralis</i>	<i>ApIndo</i>	JQ808427.1	Manado, Indonesia
<i>Asobara unicolorata</i>	<i>DSZ055</i>	KT835410.1	Yunnan, China
<i>Asobara sp. AsDen</i>	<i>AsDen</i>	MT498809.1	Denver, CO, USA