Supplementary material with:

A natural hybrid of *Impatiens*, in the introduced range, demonstrated by sequence analysis of the nuclear ribosomal DNA-gene repeat.

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Table S1 Overview of *I. balfourii*, *I. glandulifera*, *I. parviflora* and *I. balfourii* × *I. parviflora* specimens included in this study, their origin and ITS, rbcL and trnH-psbA genotypes

Species	ID	Origin	ITS	rbcL	trnH-psbA
I. balfourii	6215061	1	A	A	A
	6215071	1	A	A	A
	6215088	1	A	A	A
	Schoenenberger 4A	2	A	A	
	Schoenenberger 4B	2	A	A	
	Schoenenberger 4C	2	A	A	
I. glandulifera	4755910	2	B	B	B
	6215096	3	B	B	B
	6215109	3	B	B	B
	Schoenenberger 1A	2	B	B	
	Schoenenberger 1B	2	B	B	
	Schoenenberger 1C	2	B	B	
	Schoenenberger 8A	4	B		
	Schoenenberger 8B	4	B		
	Schoenenberger 8C	4	B		
I. parviflora	4755929	2	C	C	C
	6215151	5	C	C	C
	Schoenenberger 3A	2	C	C	
	Schoenenberger 5A	6	C	C	
	Schoenenberger 5C	6	C		
	Schoenenberger 5D	6	C		
	Schoenenberger 5E	6	C	C	
	Schoenenberger 6A	6	C	C	
	Schoenenberger 6B	6	C	C	
	Schoenenberger 6C	6	C	C	
	Schoenenberger 7B	4	C		
	Schoenenberger 7C	4	C		
	Schoenenberger 7D	4	C		
I. balfourii × *I. parviflora* (F1)	4755937	2	A+C	C	C
	4755945	2	A+C	C	C
	4755953	2	A+C	C	C
	4755961	2	A+C	C	C
	6215010	2	A+C	C	
	6215029	7	A+C	C	C
	6215037	7	A+C	C	C
	6215045	7	A+C	C	C
	6215053	7	A+C	C	C
	6215117	3	A+C	C	C
	6215125	3	A+C	C	C
	6215133	3	A+C	C	C

Origin: 1: Carasso, Ticino; 2: Magadino, Ticino; 3: Bellinzona, Ticino; 4: Ziegelbrücke, St. Gallen; 5: Arbedo, Ticino; 6: Winterthur, Zürich; 7: Gudo, Ticino

Table S1 (continued) Overview of *I. balfourii*, *I. glandulifera*, *I. parviflora* and *I. balfourii* × *I. parviflora* specimens included in this study, their origin and ITS, rbcL and trnH-psbA genotypes

Species	ID	Origin	ITS	rbcL	trnH-psbA
I. balfourii × *I. parviflora* (F1) (continued)	6215176	5	A+C	C	C
	6215184	5	A+C	C	C
	6215192	5	A+C	C	C
	6215205	5	A+C	C	C
	Schoenenberger 2A	2	A+C	C	
	Schoenenberger 2B	2	A+C	C	
	Schoenenberger 2C	2	A+C	C	
	Schoenenberger 2D	2	A+C	C	
	Schoenenberger 2E	2	A+C	C	
I. balfourii × *I. parviflora* (F2)	20130239-20130719		A+C	C	C
	20130239-20130904-1		A+C	C	C
	20130239-20130904-2		A+C	C	C
	20130239-20130904-3		A+C	C	C
	20130239-20130904-4		A+C	C	C
I. balfourii × *I. parviflora* (F3)	4755128		A+C		
	4755136		A+C		
	4755144		A+C		
	4755152		A+C		
	4755160		A+C		
	4755179		A+C		
	4755187		A+C		
	4755195		A+C		
	4755208		A+C		
	4755216		A+C		
	4755224		A+C		
	4755232		A+C		
	4755240		A+C		
	4755259		A+C		
	4755267		A+C		
	4755275		A+C		
	4755283		A+C		
	4755291		A+C		
	4755304		A+C		
	4755312		A+C		
	4755320		A+C		
	4755339		A+C		
	4755347		A+C		
	4755355		A+C		
	4755363		A+C		

Origin: 1: Carasso, Ticino; 2: Magadino, Ticino; 3: Bellinzona, Ticino; 4: Ziegelbrücke, St. Gallen; 5: Arbedo, Ticino; 6: Winterthur, Zürich; 7: Gudo, Ticino

Table S1 (continued) Overview of *I. balfourii*, *I. glandulifera*, *I. parviflora* and *I. balfourii* × *I. parviflora* specimens included in this study, their origin and ITS, rbcL and trnH-psbA genotypes

Species	ID	Origin	ITS	rbcL	trnH-psbA
I. balfourii × *I. parviflora* (F3) (continued)	4755371		A+C		
	4755381		A+C		
	4755398		A+C		
	4755400		A+C		
	4755419		A+C		

Origin: 1: Carasso, Ticino; 2: Magadino, Ticino; 3: Bellinzona, Ticino; 4: Ziegelbrücke, St. Gallen; 5: Arbedo, Ticino; 6: Winterthur, Zürich; 7: Gudo, Ticino

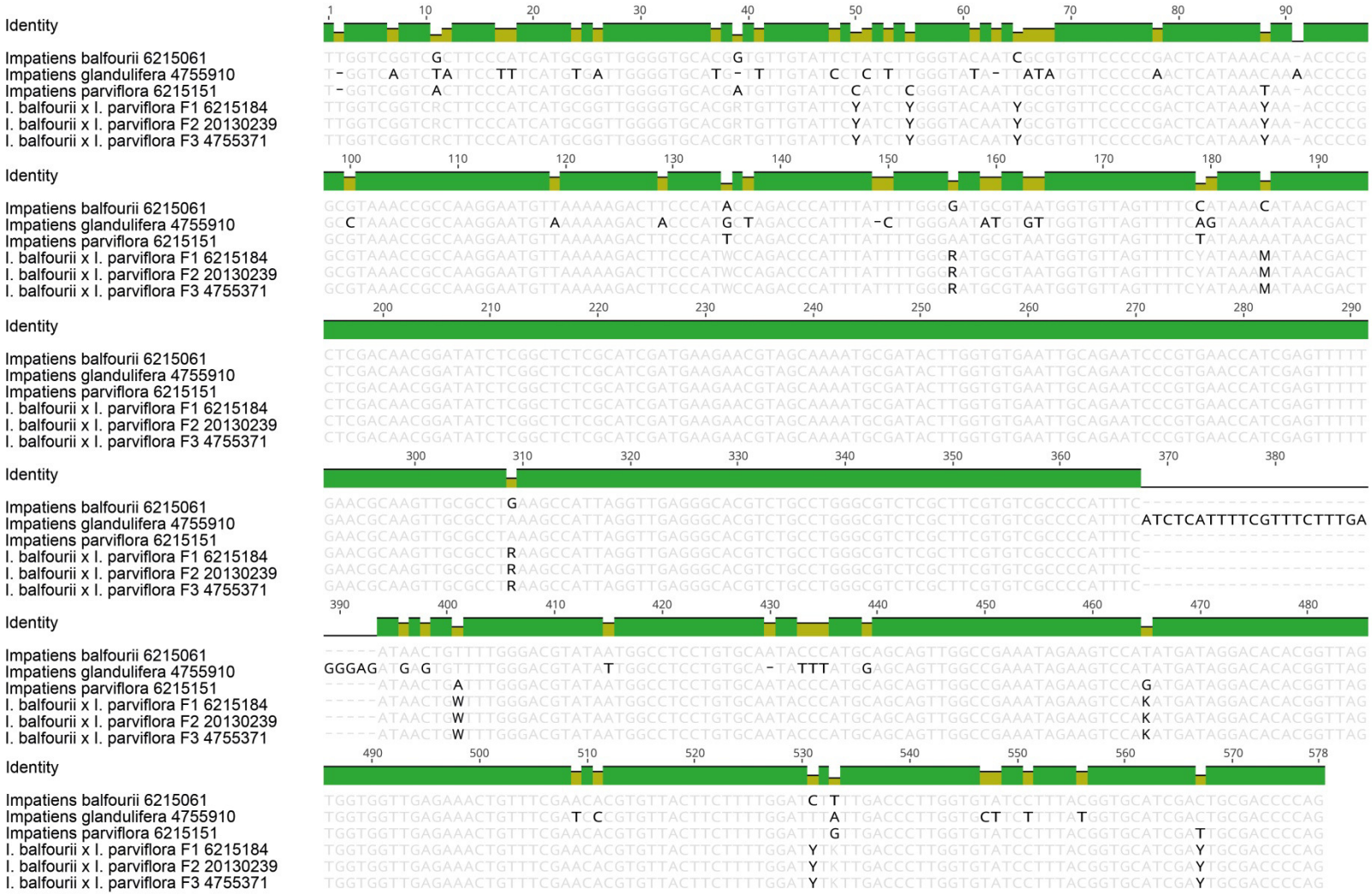

Figure S1. Alignment of the partial ribosomal DNA sequence encompassing the partial 18S, ITS1, 5.8S, ITS2 and partial 28S of *I. balfourii*, *I. glandulifera*, *I. parviflora* and the *I. balfourii* × *I. parviflora* hybrid (F1, F2, and F3). Bases identical to the overall consensus (majority) are displayed in grey. IUPAC ambiguity codes are used for positions with double peaks in the electropherograms. A 26 base insert in the ITS2 region was observed for *I. glandulifera*. Ambiguous bases corresponding with the haplotype present in both suspected parents are found in all three generations of the hybrid species

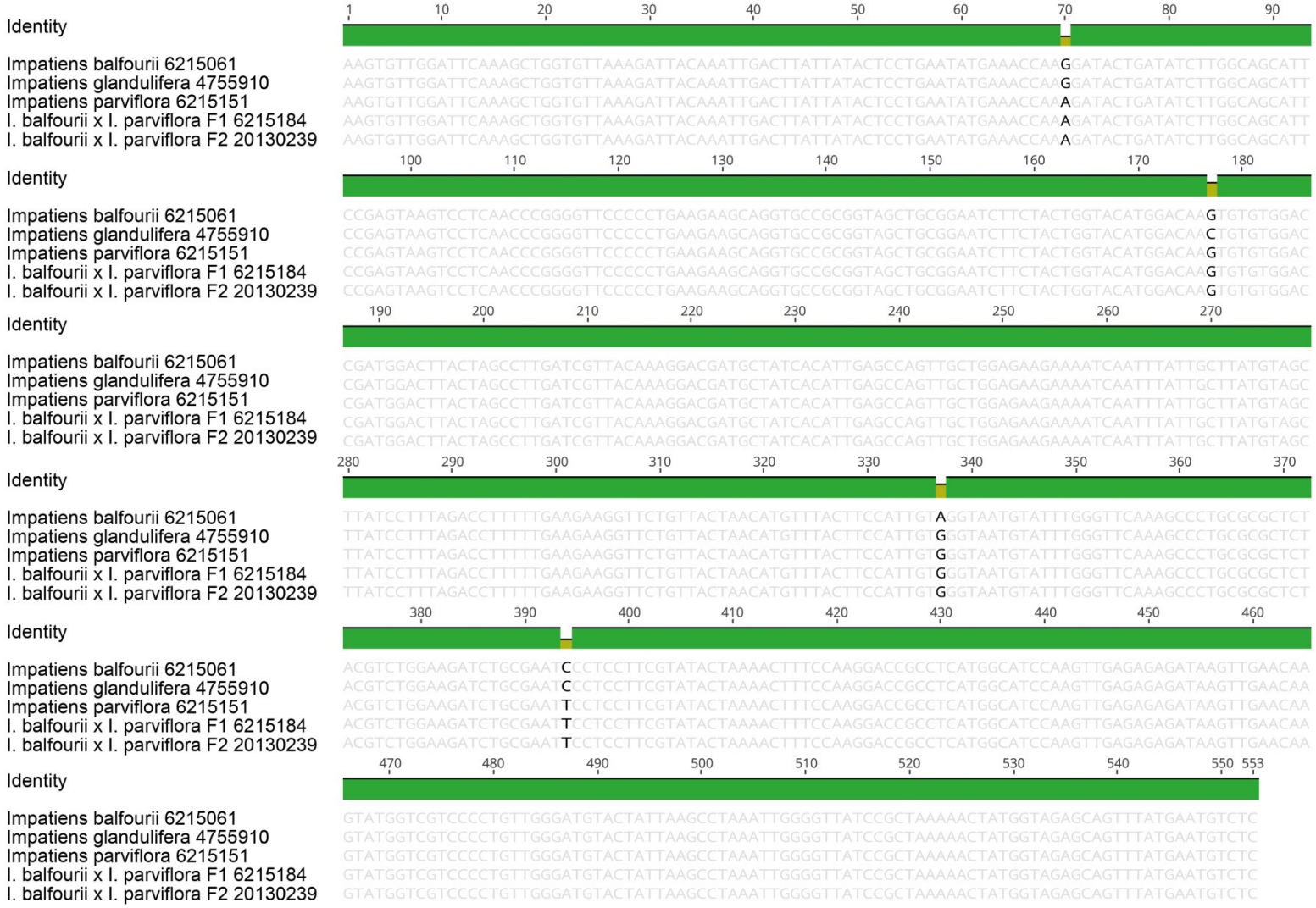

Figure S2. Alignment of the partial chloroplast rbcL gene of *I. balfourii*, *I. glandulifera*, *I. parviflora* and the *I. balfourii* × *I. parviflora* hybrid (F1 and F2). Bases identical to the overall consensus (majority) are displayed in grey. For both generations of the hybrid species, a genotype identical to the seed parent *I. parviflora* is observed.

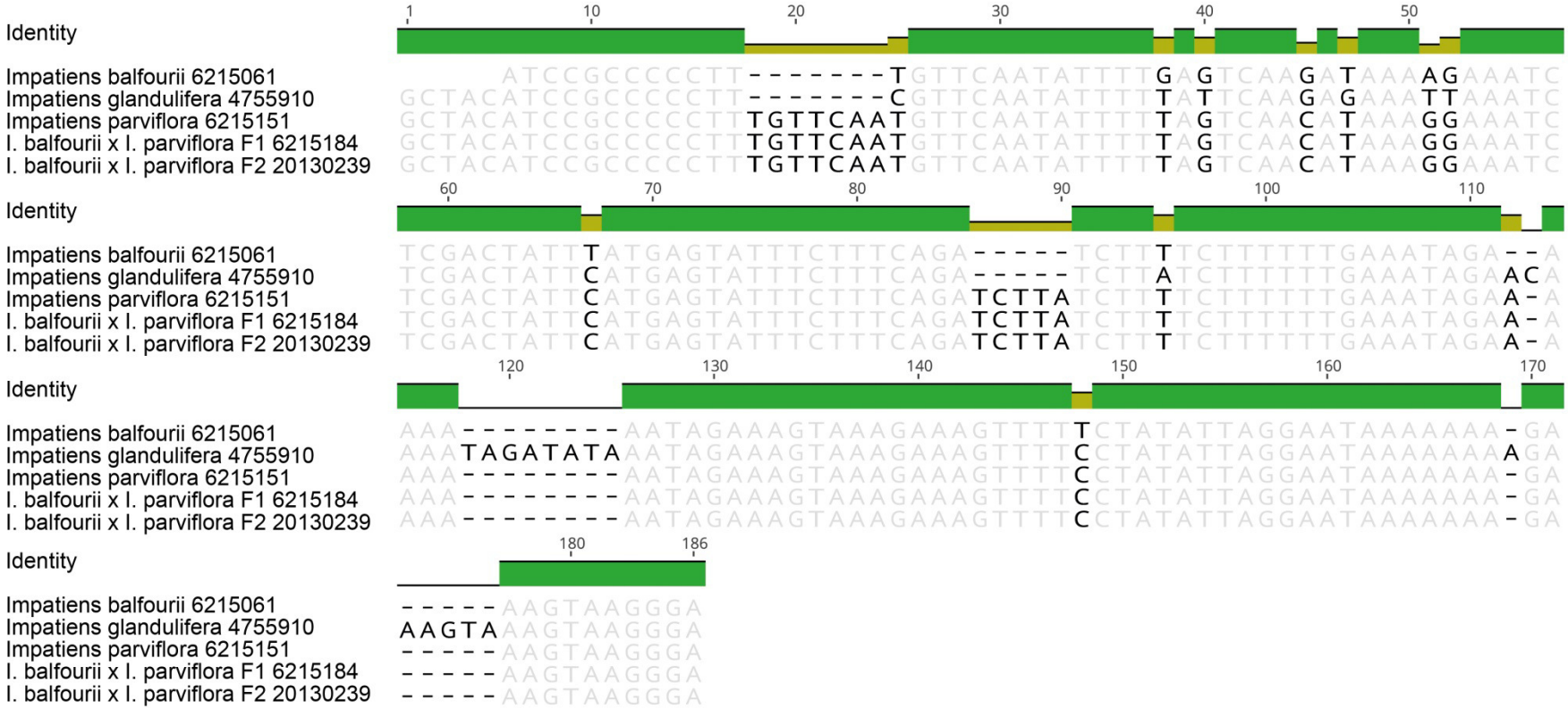

Figure S3. Alignment of the chloroplast intergenic trnH – psbA spacer encompassing the partial trnH sequence, the intergenic region, and the partial psbA sequence of *I. balfourii*, *I. glandulifera*, *I. parviflora* and the *I. balfourii* × *I. parviflora* hybrid (F1 and F2). Bases identical to the overall consensus (majority) are displayed in grey. For both generations of the hybrid species, a genotype identical to the seed parent *I. parviflora* is observed.