

Supplementary Materials: Genetic and Epigenetic Approaches for the Possible Detection of Adulteration and Auto-Adulteration in Saffron (*Crocus sativus* L.) Spice

Giovanna Soffritti , Matteo Busconi , Rosa Ana Sánchez , Jean-Marie Thiercelin ,
Moschos Polissiou , Marta Roldán and José Antonio Fernández

Maturase K sequences

>*Gardenia jasminoides* plastid gene maturase K (matK), partial cds;

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ACCAGTCCATCTGGAAATCTTGGTTCAAACCTTCGCTATTGGGTAAAAGACGCCTCTTCC
TTGCATTTATTACGATTCTTTTTCCACGAATATTGGAATTGGGATACTCTTATTGATAGAAAG
AAACCCAGTTTTTATTTTTACCAAAAAGAAATCAAAAATTATTCTTCTTGTATATAATTCT
CATGTATGGAATACGAATCCATTTTCTTCTTCTCCGTAAGGAATCTTCTCATTGCGATCA
ACATCTTTTGGAGTCTTCTTGAACGGATATATTCTATGAAAAAAGAACGCTTGTAGA
AGTCTTTGCTAAGGATTTTCAAGCCAGTATATGGTTGTTCAAAGATCCTTTCATACATTATGT
TAGGTATCAAGGAAAATCCATTCTGGTTTCAAATGGGACGCCTCTTTTGATGAATAAATGG
AAATCTTACCTGTCAATTTTTGGCAATGTCATTTTGGTATTTGGTTTACCCCGGAAGGGTC
TATATAAACCAATTACCCAACCTTCCCTTAACCTTATGGGCTATCTGTCAAGTGTGCGACT
AAACCATTCAATGGTACGGAGTCAAATGCTAGAAAATTCATTTCTAATCAATAATGCTATT
AAGAAATTTGATACCCTTGTCCACTTATCCCTCATTGGATCATTGGCTAAAGCGAAATT
TTGTAACCTTATTAGGACATCCCATTAGTAAGCCGATTGGACTGATTGGCAGATTCTGATA
TTATTGACCGATTTTTGCATATATGCAAAAACCTTCTCATTATTATAGCGGATCTTCCAAA
AAAAGAGTTTGTATCGAATAAAGTATATACTTCGACTTCTTGTGCTAAAACCTTGGCTCGT
AAACACAAAAGTACTGTACG
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>*Buddleja officinalis* plastid gene maturase K (matK), partial cds;

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ACCCTGTCCATGCAGAAATCTTGGTTCAAACCTTCGCTATTGGGTAAAAGATGCCTCTTCT
TTGCATTTATTACGATTCTTCTCAACGAGTCTTGTAAATTGGAATAGTCTTATTACTCCAAAG
AAAGCCAGTTCCTCTTTTTCAAAAAGAAATCAAAGATTATTCTTATTCTTATATAATTCTCAT
GTATGTGAATACGAATCCATTTTCGTCCTTCTACGTAATCAATCTTCTCATTAAAGATCAACA
TCTTCTGGAGTTTTTCTTGAACGAATCTATTCTATGGAAAAATAGAACGCTTGTGAACGTC
TTTGTTAAGGTTAAGGATTTTCAAGGAGAACCTATGGTTGGTCAAGGAACCTTGCATGCATTA
TGTTAGGTATCAAAGCAAATCCATTCTGGCTTCAAAGGGACGCTCTTTTTAATGAATAAAT
GGAAATGGTACCTTGTCACTTTTTGGCAATGGTATTTTTCGCTTTGGTTTCATCCAAGAAAGA
TTTATATAAACCAATTATCCAATCATTCCCTTGAATTTTTGGGCTATCTTCAAGCGTGCAGAA
TGAACCCTTCAGTGGTACGGAGTCAAATTCTAGAAAATTCATTTCTAATCAATAATGCTATT
AAGAAGTTCGATACTCTTGTCCAATTATCCGCTGATTGCGTCATTGGCTAAAGCGAAATT
TTGTAACGTATTAGGGCATCCCATAAGTAAGCCGTTTGGGCTGATTTATCAGATTCTAATA
TTATTGATCGATTTGGGCGTATATGCAGAAACCTTCTCATTATCATAGCGGATCTTCCAAA
AAAAGAGTTTGTATCGAATAAAGTATATACTTCGACTTCTTGTGCTAGAACCTTGGCTCG
TAAACACAAAAGTACTGTACG
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>*Curcuma longa* plastid gene maturase K (matK), partial cds;

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ACCCTGTCCATGCAGAAATCTTGGTTCAAATGCTTCAATCCTGGATCCAGGATGTTCTCTCTT
TACATTTATTGCAGTTCCTTCTCCACGAATATTATAAATTGGACTAGTCTCATTATTCCGAAA
AATCTATTTACGATTTTTCAAAAAGAAAATAAAGACTATTTTGGTTCTTATATAATTTATATA
TATATGAATACGAATTTCTATTAGTGTTCCTTGTAACAATCCCTTTTTTACGATTAATATC
TTCTGGAGTCCTTCTTGGAGCGAATACATTTTTATGTAATAAATAGAACATCTTGGAGTGTGCC
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GAATTTTTTGTGAGAACTCTATGGATTTTCAAGGATCCTTTCATACATTATATTCGATATC
AAGGAAAATCGATTCTGGGTTCAAGAGGGACTCATTTTTTGATGAAGAAATGGAAATACCA
CCTTGTTAATTTTTGGCAATATTATTTTCATTTTTGGTCTCAACCATATAGGATTGATATAAA
GAAATTATCAAATCTTTTATTTTCTGGGTTATTTTTCAAGTGTACAAATTAATTCTTCG
ATGGTAAGGAATCAAATGCTAGAGAATTCATTTCTGATGGATACTCTTACTAAGAAATTTG
ATACCATAATCCCAATTATTCCTCTTATTCGATCATTGTCTAAAGCTCAATTTTGTACCGTAT
CTGGGTATCCTATTAGTAAACCAATTTGGACCGATTTAGCGGATTGTGATATTATTAATAGA
TTTGGTCGGATATGTAGAAAGCTTTCTACTATCACAGTGGATCCTCAAAAAAACAGAGTTT
GTATCGAATGAAGTATATACTTCGACTTTCATGTGCCAGAATTTGGCTCGTAAACACAAA
AGTACTGTACG

>Carthamus tinctorius plastid gene maturase K (matK), partial cds;

ACCCTGTCCATGCAGAAATCTTGGTTCAGGCTCTTCGCTATTGGATAAAAGATGCTTCTTCTT
TGCATTTATTAAGATTCTTTCTCTATGAGTGTCAATAATTGGGATAGTCTTATTACTTCAAATT
CAAAGAAAGCCAGTTCCTTTTTTCAAAAAGAAATCACAGACTATTCTTTTTCCTATATACT
TCTCATGTATGTGAATATGAATCTGGCTTCATCTTTCTCCGTAACCAATCTTCTCACTTACGA
TCAACATCTTCTGGAGCCCTTCTTGAACGAATATATTTCTATGGAAAAATGGAGCATCTTGC
AAAAGCCTTTGCCAGGGCTTTTCAAGCTAATTTATGGTTGTTCAAAGATCCTTTCATGCATT
ATGTTAGGTATCAAGGAAAATCAATTCTTGCTTCAAAGGGACGTTTCTTTTGATGAATAAA
TGGAAATATTACTTTGTCAATTTCTGGAAATCTTATTTTTACCTGTGGTCTGAACCAGGAAG
GATTTATGTAAACCAATTATCCAACCATTCCCTTGACTTTCTGGGTTATTGTTCAAGTGTGCG
GCTAAAGCGTTCAATGGTCCGCAGTCAAATGCTAGAAAATGCATTTCTAATCGATAATGCT
ATTAATAAATTTGATACTATTGTTCCAATTATGCCTCTGATTGGATCCTTGGCTAAATCTAAA
TTTTGTAACGCATTGGGGCATCCTATCGGTAAGGTGATTTGGGCAATTTATCAGATTCTGA
TATTATTGATCGCTTTGGGCGTATATACAGAAACCTTTCTCATTATCATAGTGGATCTTCAA
AAAAAGAGTTTGTATCGAGTAAAGTATATACTTCGACTTTCCTTGTGCTAGAATTTAGCTC
GTAACACAAAAGTACTGTACG

>Crocus sativus plastid gene maturase K (matK), partial cds;

ACCCTGTCCATGCAGAAATCTTGGTTCAAATCCTTCAATGCTGGATTCAAGATGTTCTCTTT
TGCATTTCTTGCATTCTTTCTTACGAATATCATAATTGGAATAGTTTTTAAATTACTCAGA
ATAAATCTATTTATCTTTTTTCAAAAAGAACTAAAAGACTATTTCCGGTTCCTATACAATCTT
ATGTATATGAATGTGAATTTGTATTCGTTTTTCTTCGTAAGCACTCTTCTTATTTACGATTCAC
ATCCTTTCAAACCTTTCTTGAGCGAAGATATTTCTATGGAAAAATGGAACATCTTCAAACAG
AACATCTTATAATAGTATGTTGTGATTATTTTAAATGGAACCCTATGGTCTTCAAAGATCCTT
TCATGCATTATGCTCGATGTCAAGGAAAAGCAATTCTGGCTTCAAAGGAACTCATCTTCTG
ATGAAGAAATGGAAATATAATTTTTGTCAATTTATGGCAAATATTTTTACTTTTGGTATCA
ATCATAACAGGATCCATATAAACCAACTATCAAACCATTCTTTCCATTTTCTGGGTTATCTTTC
AAGTTTACTAAAAAATTTCTCGACGGTAAGGAATCAAATGTTAGATAATTCATTTCTAATAG
ATACTCTTACTATGAAATTTGATACCGCAGTCCCAGTATTTTTCTTATTAGATCTTTATCTA
AAGCTCAATTTGTACCGTATCGGGACATCCTATTAGTAAGCCCATCTGGACCGATTTATCA
GATTCTAGTATTATTGAGCGATTTGGTCCGATATGTAGAAATCTTTCTCATTATCATAGTGGG
TCCTCAAAAAAACAGGGGTTGTATCGAATAAAG

RUBISCO large subunit sequences

>Crocus sativus plastid gene RUBISCO large subunit (rbcL), partial cds;

ACCACAAACAGAGACTAAAGCAAGTGCTGGATTTAAGGCTGGTGTAAAGATTACAGATT
GACTTATTATACTCCGGATCACGAAACCAAAGATACTGATATCTTGGCAGCATTCCGAGTA
ACTCCTCAACCCGGAGTTCCTGCTGAAGAAGCGGGGGCAGCGGTAGCTGCGGAATCTTCTA
CTGGTACATGGACAACAGTGTGGACTGATGGACTTACCAGTCTTGATCGTTACAAAGGACG
ATGCTATCATATCGAGGCCGTTGTTGGGGAGGAAAATCAATATATTGCTTATGTAGCTTATC

CTTTAGACCTTTTTGAAGAAGGTTCTGTTACTAATATGTTTACTTCCATTGTGGGTAATGTAT
TTGGTTCAAAGCCCTACGAGCTCTACGTCTGGAGATTGCGAATCCCCCTGCTTATCC
AAAACCTTCCAAGGCCACCCCATGGCATCCAGGTTGAAAGAGATAAATTAACAAGTAT
GGTCGTCCCCTATTGGGATGTACTATTAACCAAAATTGGGATTATCTGCAAAAACTACG
GTAGAGCGGTTTATGAATGTCTACGCGGTGGACTTGATTTTAC

>*Buddleja officinalis* plastid gene RUBISCO large subunit (rbcL), partial cds;

ACCACAAACAGAGACTAAAGCAAGTGTGGATTCAAAGCGGGTGTAAAGAGTACAAATT
GACTTATTATACTCCTGAATACGAAACCAAAGATACTGATATCTTGGCAGCATTCCGAGTA
ACTCCTCAACCTGGAGTTCGCGCTGAAGAAGCAGGGGCCGCGGTAGCTGCCGAATCTTCTA
CTGGTACATGGACAACCTGTGTGGACCGATGGACTTACGAACCTTGATCGTTACAAAGGGCG
ATGCTACCACATCGAGCCGTTCTGGAGAAACAGATCAATATATCTGTTATGTAGCTTACC
CTTTAGACCTTTTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGAAATGTAT
TTGGATTCAAAGCCCTGCGTGCTCTACGTCTGGAAGATCTGCGAATCCCTCCTGCTTATGTT
AAAACCTTCCAAGGCCCGCCTCATGGGATCCAAGTTGAGAGAGATAAATTGAACAAGTAT
GGTCGTCCCCTGTTGGGATGTACTATTAACCTAAATTGGGGTTATCTGCTAAAACTATGG
TAGAGCAGTTTATGAATGTCTTCGCGGTGGACTTGATTTTAC

>*Carthamus tinctorius* plastid gene RUBISCO large subunit (rbcL), partial cds;

ACCACAAACAGAGACTAAAGCAAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAATT
GACTTATTATACTCCTGACTATAAAACCAAAGGATACTGATATCTTGGCAGCATTTCGAGTAA
CTCCTCAACCTGGAGTTCGCGCTGAAGAAGCAGGGGCCGAGTAGCTGCCGAATCTTCTAC
TGGTACATGGACAACCTGTGTGGACCGATGGGCTTACGAGCCTTGATCGTTACAAAGGGCGA
TGCTATGGAATCGAGCCTGTTCTGGAGAAGAACTCAATTTATTGCTTATGTAGCTTACCC
ATTAGACCTTTTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATT
TGGGTTCAAAGCCCTGCGTGCTCTACGTCTGGAAGATTTGCGAATCCCTACTGCGTATGTTA
AAACTTTCCAAGGTCGCGCTCACGGCATCCAAGTTGAGAGAGATAAATTGAACAAGTATGG
TCGTCCTGTTGGGATGTACTATTAACCTAAATTGGGGTTATCCGCTAAAACTACGGTA
GAGCTGTTTATGAATGTCTTCGCGGTGGACTTGATTTTAC

>*Gardenia jasminoides* plastid gene RUBISCO large subunit (rbcL), partial cds;

ACCACAAACAGAGACTAAAGCAAGTGTGGATTCAAAGCTGGTGTAAAGAGTACAAATT
GACTTATTATACTCCTGAATACGAAACCAAAGATACTGATATCTTGGCAGCATTCCGAGTA
ACTCCTCAACCGGGAGTTCACCTGAAGAAGCGGGGCCGCGGTAGCTGCCGAATCTTCTA
CTGGTACATGGACAACCTGTGTGGACCGATGGGCTTACCAGCCTTGATCGTTACAAAGGGTCG
ATGCTATCACATCGAGCCAGTTCCTGGAGAAGAAGATCAATTTATTGCTTATGTAGCTTACC
CCTTAGACCTTTTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTAT
TTGGGTTCAAAGCCCTGCGCGCTCTACGTCTGGAAGATTTGCGAATCCCTACTTCTTATGTT
AAAACCTTCCAAGGGCCGCTCATGGCATCCAAGTTGAGAGAGATAAATTGAACAAGTAT
GGTCGTCCCCTGTTGGGATGTACTATTAACCTAAATTAGGTTTATCTGCTAAAACTACGG
TAGAGCTGTTTATGAATGTCTTCGCGGTGGACTTGATTTTAC

>*Curcuma longa* plastid gene RUBISCO large subunit (rbcL), partial cds;

ACCACAAACAGAGACTAAAGCAAGTGTGGATTTAAAGCTGGTGTAAAGATTACAAATT
GAATTATTATACTCCTGACTACGAAGTCAAAGATACTGATATCTTGGCAGCATTCCGAGTA
ACTCCTCAACCTGGAGTTCACCCGAAGAAGCAGGGGCTGCGGTAGCTGCCGAATCTTCCA
CTGGTACATGGACAACCTGTGTGGACTGATGGACTTACCAGTCTTGATCGTTACAAAGGGCG
ATGCTACCACATAGAGCCTGTTATTGGGGAGGATAATCAATATATTGCTTATGTAGCTTATC
CATTAGACCTTTTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTGTGGGTAATGTGT
TTGGTTCAAAGCCTTACGCGCTCTACGTTTGGAGGATCTGCGAATCCCACTTCCTATTCCA
AAACTTTCCAAGGCCCGCCTCACGGCATTCAAGTTGAAAGAGATAAGTTGAACAAGTATGG

TCGTCCCCTATTGGGATGTACTATTAAACCAAAATTGGGATTATCTGCAAAAAACTACGGT
AGAGCAGTTTATGAGTGTCTACGCGGTGGACTTGATTTTAC