

جدول تکمیلی ۱- ژنوتیپ‌های گندم دوروم مورد مطالعه

Supplementary Table 1. The studied durum wheat genotypes

| Code | Genotype name |
|------|--|
| 1 | Saji (Check) |
| 2 | Zahab (Check) |
| 3 | Sepand (Check) |
| 4 | Tabesh (Check) |
| 5 | Saji/ALTAR IRD16-21-105-4-OSAR-OSAR-OSAR-OSAR-4SAR |
| 6 | Stj3//Bcr/Lks4/3n"er-3/3/Received from GeneBank SPII (Dr. Aghaee) IRD16-21-105-9-OSAR-OSAR-OSAR-OSAR-1SAR |
| 7 | Stj3//Bcr/Lks4/3n"er-3/3/Received from GeneBank SPII (Dr. Aghaee) IRD16-21-105-9-OSAR-OSAR-OSAR-OSAR-2SAR |
| 8 | Saji/7//ICAMORTA0468/6/21563/AA//Fg/3/D68102A2A1A/4/Vitron/5/Bcr IRD16-21-105-20-OSAR-OSAR-OSAR-OSAR-1SAR |
| 9 | Saji/7//ICAMORTA0468/6/21563/AA//Fg/3/D68102A2A1A/4/Vitron/5/Bcr IRD16-21-105-20-OSAR-OSAR-OSAR-OSAR-5SAR |
| 10 | Saji//Terbol975//Geruftel2 IRD16-21-105-21-OSAR-OSAR-OSAR-OSAR-3SAR |
| 11 | Saji//Terbol975//Geruftel2 IRD16-21-105-21-OSAR-OSAR-OSAR-OSAR-5SAR |
| 12 | Saji/4//IcamorTA0471//IcamorTA0459//Waha/3//Mgn13//Ainzen1 IRD16-21-105-32-OSAR-OSAR-OSAR-OSAR-1SAR |
| 13 | Saji/4//IcamorTA0471//IcamorTA0459//Waha/3//Mgn13//Ainzen1 IRD16-21-105-32-OSAR-OSAR-OSAR-OSAR-5SAR |
| 14 | Oss11//Stj5/5//Bicrederaa1/4//BezaizSHF//.../6//Terbol975//Geruftel2 IRD16-21-105-39-OSAR-OSAR-OSAR-OSAR-1SAR |
| 15 | Oss11//Stj5/5//Bicrederaa1/4//BezaizSHF//.../6//Terbol975//Geruftel2 IRD16-21-105-39-OSAR-OSAR-OSAR-OSAR-5SAR |
| 16 | Oss11//Stj5/5//Bicrederaa1/4//BezaizSHF//.../7//PH896_21/5//BRAK_2//AJAIA_2//SOLGA_8/3//CANELO_8//SORA/2*PLATA_12/4//YAZI_1//AKAKI_4//SOMAT_3/3//AUK//GUIL//GREEN/6//HUBEI//SOOTY_9//RASCON_37/3/2*SOOTY_9//RASCON_37/4//SOOTY_9//RASCON_37 IRD16-21-105-40-OSAR-OSAR-OSAR-OSAR-1SAR |
| 17 | Oss11//Stj5/5//Bicrederaa1/4//BezaizSHF//.../7//PH896_21/5//BRAK_2//AJAIA_2//SOLGA_8/3//CANELO_8//SORA/2*PLATA_12/4//YAZI_1//AKAKI_4//SOMAT_3/3//AUK//GUIL//GREEN/6//HUBEI//SOOTY_9//RASCON_37/3/2*SOOTY_9//RASCON_37/4//SOOTY_9//RASCON_37 IRD16-21-105-40-OSAR-OSAR-OSAR-OSAR-4SAR |
| 18 | Miki3 (Stj3//Bcr/Lks4)//Icarasha2 (Stj3//Bcr/Lks4/3//Ter3) IRD16-21-105-34-OSAR-OSAR-OSAR-OSAR-1SAR |
| 19 | PH896_21/5//BRAK_2//AJAIA_2//SOLGA_8/3//CANELO_8//SORA/2*PLATA_12/4//YAZI_1//AKAKI_4//SOMAT_3/3//AUK//GUIL//GREEN/6//HUBEI//SOOTY_9//RASCON_37/3/2*SOOTY_9//RASCON_37/4//SOOTY_9//RASCON_37/7//SD19539//Waha/3//Stj//Mrb3/6//Icajihan12 IRD16-21-105-41-OSAR-OSAR-OSAR-OSAR-1SAR |
| 20 | PH896_21/5//BRAK_2//AJAIA_2//SOLGA_8/3//CANELO_8//SORA/2*PLATA_12/4//YAZI_1//AKAKI_4//SOMAT_3/3//AUK//GUIL//GREEN/6//HUBEI//SOOTY_9//RASCON_37/3/2*SOOTY_9//RASCON_37/4//SOOTY_9//RASCON_37/7//SD19539//Waha/3//Stj//Mrb3/6//Icajihan12 IRD16-21-105-41-OSAR-OSAR-OSAR-OSAR-4SAR |
| 21 | PH896_21/5//BRAK_2//AJAIA_2//SOLGA_8/3//CANELO_8//SORA/2*PLATA_12/4//YAZI_1//AKAKI_4//SOMAT_3/3//AUK//GUIL//GREEN/6//HUBEI//SOOTY_9//RASCON_37/3/2*SOOTY_9//RASCON_37/4//SOOTY_9//RASCON_37/7//Stj3//Bcr/Lks4/3n"er-3 IRD16-21-105-42-OSAR-OSAR-OSAR-OSAR-1SAR |
| 22 | PH896_21/5//BRAK_2//AJAIA_2//SOLGA_8/3//CANELO_8//SORA/2*PLATA_12/4//YAZI_1//AKAKI_4//SOMAT_3/3//AUK//GUIL//GREEN/6//HUBEI//SOOTY_9//RASCON_37/3/2*SOOTY_9//RASCON_37/4//SOOTY_9//RASCON_37/7//Stj3//Bcr/Lks4/3n"er-3 IRD16-21-105-42-OSAR-OSAR-OSAR-OSAR-3SAR |
| 23 | ALTAR84/6//Oss11//Stj5/5//Bicrederaa1/4//BezaizSHF//... IRD16-21-105-43-OSAR-OSAR-OSAR-OSAR-1SAR |
| 24 | ALTAR84/6//Oss11//Stj5/5//Bicrederaa1/4//BezaizSHF//... IRD16-21-105-43-OSAR-OSAR-OSAR-OSAR-5SAR |
| 25 | ALTAR 84//Miki3 (Stj3//Bcr/Lks4) IRD16-21-105-44-OSAR-OSAR-OSAR-OSAR-1SAR |
| 26 | ALTAR 84//Miki3 (Stj3//Bcr/Lks4) IRD16-21-105-44-OSAR-OSAR-OSAR-OSAR-4SAR |

Supplementary Table 1. Continued

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| 27 | PH896_21/5/BRAK_2/AJAIA_2//SOLGA_8/3/CANELO_8//SORA/2*PLATA_12/4/YAZI_1/AKAKI_4//SOMAT_3/3/AUK/GUIL//GREEN/6/HUBEI//SOOTY_9/RASCON_37/3/2*SOOTY_9/RASCON_37/4/SOOTY_9/RASCON_37/7/Ossl1/Stj5/5/Bicrederaa1/4/BEZAIZSHF//SD19539/Waha/3/Stj/Mrb3/6/Beltagy2 | IRD16-21-105-49-OSAR-OSAR-OSAR-OSAR-41SAR |
| 28 | PH896_21/5/BRAK_2/AJAIA_2//SOLGA_8/3/CANELO_8//SORA/2*PLATA_12/4/YAZI_1/AKAKI_4//SOMAT_3/3/AUK/GUIL//GREEN/6/HUBEI//SOOTY_9/RASCON_37/3/2*SOOTY_9/RASCON_37/4/SOOTY_9/RASCON_37/7/Ossl1/Stj5/5/Bicrederaa1/4/BEZAIZSHF//SD19539/Waha/3/Stj/Mrb3/6/Beltagy3 | IRD16-21-105-49-OSAR-OSAR-OSAR-OSAR-4SAR |
| 29 | Stj3//Bcr/Lks4/3n"er-3/3/Miki3 (Stj3//Bcr/Lks4) | IRD16-21-105-53-OSAR-OSAR-OSAR-OSAR-3SAR |
| 30 | Stj3//Bcr/Lks4/3n"er-3/3/Miki3 (Stj3//Bcr/Lks4) | IRD16-21-105-53-OSAR-OSAR-OSAR-OSAR-4SAR |
| 31 | Stj3//Bcr/Lks4/3n"er-3/3/Bicrederaa1/Azeghar2//Icajihan25 | IRD16-21-105-54-OSAR-OSAR-OSAR-OSAR-1SAR |
| 32 | Stj3//Bcr/Lks4/3n"er-3/3/Bicrederaa1/Azeghar2//Icajihan25 | IRD16-21-105-54-OSAR-OSAR-OSAR-OSAR-4SAR |
| 33 | Saji/5/Aghrass1//Bezai982/Bcrch1/4/IcamorTA0462 | IRD16-21-105-55-OSAR-OSAR-OSAR-OSAR-4SAR |
| 34 | Saji/5/Aghrass1//Bezai982/Bcrch1/4/IcamorTA0462 | IRD16-21-105-55-OSAR-OSAR-OSAR-OSAR-5SAR |
| 35 | Saji/5/Ter1/3/Stj3//Bcr/Lks4/4/Aghrass1/3/Mrf1//Mrb16/Ru | IRD16-21-105-56-OSAR-OSAR-OSAR-OSAR-5SAR |
| 36 | Saji/3/Bicrederaa1/Azeghar2//Icajihan25 | IRD16-21-105-57-OSAR-OSAR-OSAR-OSAR-1SAR |
| 37 | Saji/3/Bicrederaa1/Azeghar2//Icajihan25 | IRD16-21-105-57-OSAR-OSAR-OSAR-OSAR-5SAR |
| 38 | Saji/4/Icasyr1/3/Gcn//Stj/Mrb3 | IRD16-21-105-58-OSAR-OSAR-OSAR-OSAR-5SAR |
| 39 | Saji/4/Mgnl3/Ainzen1/3/Ter1//Mrf1/Stj2 | IRD16-21-105-59-OSAR-OSAR-OSAR-OSAR-4SAR |
| 40 | Saji/4/Mgnl3/Ainzen1/3/Ter1//Mrf1/Stj2 | IRD16-21-105-59-OSAR-OSAR-OSAR-OSAR-5SAR |
| 41 | Saji/11/LABUD/NIGRIS_3//GAN/3/AJAIA_13/YAZI/10/PLATA_10/6/MQUE/4/USDA573//QFN/AA_7/3/ALBA-D/5/AVO/HUI/7/PLATA_13/8/THKNEE_11/9/CHEN/ALTA | IRD16-21-105-60-OSAR-OSAR-OSAR-OSAR-1SAR |
| 42 | Saji/11/LABUD/NIGRIS_3//GAN/3/AJAIA_13/YAZI/10/PLATA_10/6/MQUE/4/USDA573//QFN/AA_7/3/ALBA-D/5/AVO/HUI/7/PLATA_13/8/THKNEE_11/9/CHEN/ALTA | IRD16-21-105-60-OSAR-OSAR-OSAR-OSAR-4SAR |
| 43 | LABUD/NIGRIS_3//GAN/3/AJAIA_13/YAZI/10/PLATA_10/6/MQUE/4/USDA573//QFN/AA_7/3/ALBA-D/5/AVO/HUI/7/PLATA_13/8/THKNEE_11/9/CHEN/ALTAR 84/3/HUI/POC//BUB/RUFO/4/FNFOOT/11/SOMAT_4/SILVER_1/3/FOCHA_1/ALAS//4*FOCHA_1/4/SOMAT_3/PHAX_1//TILO_1/LOTUS_4/12/ICAMOR-TA04 | IRD16-21-105-62-OSAR-OSAR-OSAR-OSAR-1SAR |
| 44 | LABUD/NIGRIS_3//GAN/3/AJAIA_13/YAZI/10/PLATA_10/6/MQUE/4/USDA573//QFN/AA_7/3/ALBA-D/5/AVO/HUI/7/PLATA_13/8/THKNEE_11/9/CHEN/ALTAR84/3/HUI/POC//BUB/RUFO/4/FNFOOT/11/SOMAT_4/SILVER_1/3/FOCHA_1/ALAS//4*FOCHA_1/4/SOMAT_3/PHAX_1//TILO 1/LOTUS 4/12/ICAMOR-TA05 | IRD16-21-105-62-OSAR-OSAR-OSAR-OSAR-5SAR |
| 45 | LABUD/NIGRIS_3//GAN/3/AJAIA_13/YAZI/10/PLATA_10/6/MQUE/4/USDA573//QFN/AA_7/3/ALBA-D/5/AVO/HUI/7/PLATA_13/8/THKNEE_11/9/CHEN/ALTAR 84/3/HUI/POC//BUB/RUFO/4/FNFOOT/11/SOMAT_4/SILVER_1/3/FOCHA_1/ALAS//4*FOCHA_1/4/SOMAT_3/PHAX_1//TILO_1/LOTUS_4/12/Ossl1/Stj5 | IRD16-21-105-63-OSAR-OSAR-OSAR-OSAR-1SAR |
| 46 | LABUD/NIGRIS_3//GAN/3/AJAIA_13/YAZI/10/PLATA_10/6/MQUE/4/USDA573//QFN/AA_7/3/ALBA-D/5/AVO/HUI/7/PLATA_13/8/THKNEE_11/9/CHEN/ALTAR 84/3/HUI/POC//BUB/RUFO/4/FNFOOT/11/SOMAT_4/SILVER_1/3/FOCHA_1/ALAS//4*FOCHA_1/4/SOMAT_3/PHAX_1//TILO_1/LOTUS_4/12/Ossl1/Stj5 | IRD16-21-105-63-OSAR-OSAR-OSAR-OSAR-5SAR |
| 47 | WID22209/5/PLATA_6/GREEN_17//SNITAN/4/YAZI_1/AKAKI_4//SOMAT_3/3/AUK/GUIL//GREEN/6/YAV79/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1/5/MINIMUS/COMB/7/IcaKader2 | IRD16-21-105-64-OSAR-OSAR-OSAR-OSAR-2SAR |
| 48 | WID22209/5/PLATA_6/GREEN_17//SNITAN/4/YAZI_1/AKAKI_4//SOMAT_3/3/AUK/GUIL//GREEN/6/YAV79/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1/5/MINIMUS/COMB/7/IcaKader2 | IRD16-21-105-64-OSAR-OSAR-OSAR-OSAR-4SAR |
| 49 | AJAIA_4/CANELO_3/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1/6/PATKA_7/YAZI_1//FICHE_6/3/SOOTY_9/RASCON_37/4/SOMAT_3/PHAX_1//TILO_1/LOTUS_4/5/SOOTY_9/RASCON_37/7/Bicrederaa1/Azeghar2//Icajihan25Bicrederaa1/Azeghar2//Icajihan25 | IRD16-21-105-67-OSAR-OSAR-OSAR-OSAR-1SAR |

Supplementary Table 1. Continued

جدول تکمیلی ۱- ادامه

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| 50 | AJAIA_4/CANELO_3/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1/6/PATKA_7/YAZI_1//FICHE_6/3/SOOTY_9/RASCON_37/4/SOMAT_3/PHAX_1//T ILO_1/LOTUS_4/5/SOOTY_9/RASCON_37/7/Bicrederaa1/Azeghar2//Icajihan25Bicrederaa1/Azeghar2//Icajihan25 | IRD16-21-105-67-OSAR-OSAR-OSAR-OSAR-4SAR |
| 51 | AJAIA_4/CANELO_3/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1/6/PATKA_7/YAZI_1//FICHE_6/3/SOOTY_9/RASCON_37/4/SOMAT_3/PHAX_1//T ILO_1/LOTUS_4/5/SOOTY_9/RASCON_37/7/Ossl1/Stj5/5/Bicrederaa1/4/BEZAIZSHF//SD19539/Waha/3/Stj/Mrb3/6/Stj3//Bcr/Lks4/3/Ter3 | IRD16-21-105-68-OSAR-OSAR-OSAR-OSAR-1SAR |
| 52 | ICAMOR-TA04-62/4/Gdr-2//Sw Algia/Gdr1)-43/3/ICAMOR-TA04-63/5/Ter-1//Mrf1/Stj/6/Miki3(Stj3//Bcr/Lks4) | IRD16-21-105-69-OSAR-OSAR-OSAR-OSAR-2SAR |
| 53 | ICAMOR-TA04-62/4/Gdr-2//Sw Algia/Gdr1)-43/3/ICAMOR-TA04-63/5/Ter-1//Mrf1/Stj/6/Miki3 (Stj3//Bcr/Lks4) | IRD16-21-105-69-OSAR-OSAR-OSAR-OSAR-105SAR |
| 54 | ICAMOR-TA04-62/4/Gdr-2//Sw Algia/Gdr1)-43/3/ICAMOR-TA04-63/5/Ter-1//Mrf1/Stj/6/Ouasloukos1/5/Azn1/4/BEZAIZSHF | IRD16-21-105-70-OSAR-OSAR-OSAR-OSAR-2SAR |
| 55 | ICAMOR-TA04-62/4/Gdr-2//Sw Algia/Gdr1)-43/3/ICAMOR-TA04-63/5/Ter-1//Mrf1/Stj/6/Miki3 (Stj3//Bcr/Lks4) | IRD16-21-105-71-OSAR-OSAR-OSAR-OSAR-1SAR |
| 56 | ICAMOR-TA04-62/4/Gdr-2//Sw Algia/Gdr1)-43/3/ICAMOR-TA04-63/5/Ter-1//Mrf1/Stj/6/Miki3 (Stj3//Bcr/Lks4) | IRD16-21-105-71-OSAR-OSAR-OSAR-OSAR-2SAR |
| 57 | Saji/7/AJAIA_4/CANELO_3/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1/6/PATKA_7/YAZI_1//FICHE_6/3/SOOTY_9/RASCON_37/4/SOMAT_3/PHA X_1//TILO_1/LOTUS_4/5/SOOTY_9/RASCON_37 | IRD16-21-105-73-OSAR-OSAR-OSAR-OSAR-2SAR |
| 58 | Stj3//Bcr/Lks4/3n"er-3/5/Ter1/3/Stj3//Bcr/Lks4/4/Aghrass1/3/Mrf1//Mrb16/Ru | IRD16-21-105-75-OSAR-OSAR-OSAR-OSAR-2SAR |
| 59 | Saji/Berkmen-469 | IRD17-21-105-74-OMAR-OSAR-OSAR-OSAR-2SAR |
| 60 | Saji/Berkmen-469 | IRD17-21-105-74-OMAR-OSAR-OSAR-OSAR-4SAR |
| 61 | Saji/3/BERKMEN//68.111/WARD | IRD17-21-105-82-OMAR-OSAR-OSAR-OSAR-1SAR |
| 62 | Saji/3/BERKMEN//68.111/WARD | IRD17-21-105-82-OMAR-OSAR-OSAR-OSAR-4SAR |
| 63 | Saji/7/P91.272.3.1/3*MEXI75//2*JUPAREC2001/5/ARTICO/AJAIA_3//HUALITA/3/FULVOUS_1/MFOWL_13/4/TECA96/TILO_1/6/RISSA/GAN//POHO_1 /3/PLATA_3//CREX/ALLA*2/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1 | IRD17-21-105-83-OMAR-OSAR-OSAR-OSAR-1SAR |
| 64 | Saji/7/P91.272.3.1/3*MEXI75//2*JUPAREC2001/5/ARTICO/AJAIA_3//HUALITA/3/FULVOUS_1/MFOWL_13/4/TECA96/TILO_1/6/RISSA/GAN//POHO_1 /3/PLATA_3//CREX/ALLA*2/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1 | IRD17-21-105-83-OMAR-OSAR-OSAR-OSAR-4SAR |
| 65 | Saji/Berkmen-469 | IRD17-21-105-88-OMAR-OSAR-OSAR-OSAR-OSAR-1SAR |
| 66 | Saji/Berkmen-469 | IRD17-21-105-88-OMAR-OSAR-OSAR-OSAR-OSAR-2SAR |
| 67 | Stj3//Bcr/Lks4/3/Ter-3/4/Berkmen-469 | IRD17-21-105-96-OMAR-OSAR-OSAR-OSAR-OSAR-1SAR |
| 68 | Stj3//Bcr/Lks4/3/Ter-3/4/Berkmen-469 | IRD17-21-105-96-OMAR-OSAR-OSAR-OSAR-OSAR-3SAR |
| 69 | Dehdasht/6/SIMETO/3/SORA/2*PLATA_12//SRN_3/NIGRIS_4/5/TOSKA_26/RASCON_37//SNITAN/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1*DU RGN1396-1OGn-OGn-OGn-OSAR-1SAR | |
| 70 | Dehdasht/Icarasha2*DURGN1396-2-0Gn | IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR |
| 71 | Dehdasht/Icarasha2*DURGN1396-2-0Gn | IRDWGN-2017-1OGn-OGn-OGn-OSAR-4SAR |
| 72 | Dehdasht/8/JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn | IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR |
| 73 | Dehdasht/8/JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn | IRDWGN-2017-1OGn-OGn-OGn-OSAR-5SAR |
| 74 | Dehdasht/4/Icarasha2*Stj3//Bcr/Lks4/3/Ter3*DURGN1396-9-0Gn | IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR |
| 75 | Dehdasht/4/Icarasha2*Stj3//Bcr/Lks4/3/Ter3*DURGN1396-9-0Gn | IRDWGN-2017-1OGn-OGn-OGn-OSAR-3SAR |

Supplementary Table 1. Continued

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| 76 | Dehdasht/4/Icarasha2*Stj3//Bcr/Lks4/3/Ter3*DURGN1396-9-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-5SAR |
| 77 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR |
| 78 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-5SAR |
| 79 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/5/Mgnl3/Ainzen-1/4/Aghrass-1/3/Mrf1//Mrb16/Ru*DURGN1396-17-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR |
| 80 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/5/Mgnl3/Ainzen-1/4/Aghrass-1/3/Mrf1//Mrb16/Ru*DURGN1396-17-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-2SAR |
| 81 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/6/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgnl3/Ainzen0*DURGN1396-18-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR |
| 82 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR |
| 83 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-3SAR |
| 84 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-4SAR |
| 85 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/CandocrossH25/Ysf1//CM829/CandocrossH25*DURGN1396-24-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR |
| 86 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/CandocrossH25/Ysf1//CM829/CandocrossH25*DURGN1396-24-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-4SAR |
| 87 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/CandocrossH25/Ysf1//CM829/CandocrossH25*DURGN1396-24-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-5SAR |
| 88 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/Ossl1/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-25-0Gn IRDWGN-2017-1-0Gn(2018)-0Gn(2019)-OSA-2SAR |
| 89 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/Ossl1/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-25-0Gn IRDWGN-2017-1-0Gn(2018)-0Gn(2019)-OSA-4SAR |
| 90 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/8/JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN/4/ SOMAT_4/INTER_8/5/SOITY_9/RASCON_37 /7/GUAYACAN INIA/ KUCUK/4/ARMENT//S IRDWGN-2017-1OGn-OGn-OGn-OSAR-4SAR |
| 91 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/8/JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN/4/ SOMAT_4/INTER_8/5/SOITY_9/RASCON_37 /7/GUAYACAN INIA/ KUCUK/4/ARMENT//S IRDWGN-2017-1OGn-OGn-OGn-OSAR-5SAR |
| 92 | BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgnl3/Ainzen0*DURGN1396-27-0Gn IRDWGN-2017-1-0Gn(2018)-0Gn(2019)-OSAR-OSAR-2SAR |
| 93 | Icarasha2/5/BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1*DURGN1396-29-0Gn IRDWGN-2017-1-0Gn(2018)-0Gn(2019)-OSAR-OSAR-1SAR |

Supplementary Table 1. Continued

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| 94 | Icarasha2/5/BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1*DURGN1396-29-0Gn IRDWGN-2017-1-0Gn(2018)-0Gn(2019)-OSAR-OSAR-3SAR | |
| 95 | Icarasha2/5/BCRIS/BICUM//LLARETA INIA/3/DUKEM_12/2*RASCON_21/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1*DURGN1396-29-0Gn IRDWGN-2017-1-0Gn(2018)-0Gn(2019)-OSAR-OSAR-5SAR | |
| 96 | Icarasha2/6/Oss11/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-31-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR | |
| 97 | Icarasha2/6/Oss11/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-31-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-2SAR | |
| 98 | Icarasha2/6/Oss11/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-31-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-5SAR | |
| 99 | YAV79/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1/10/INRAM_1805/9/USDA595/3/D67.3/RABI//CRA/4/ALO/5/HUI/YAV_1/6/ARDENTE/7/HUI/YA V79/8/POD_9/10/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0*DURGN1396-46-0Gn IRDWGN-2017-1-0Gn-OSAR-OSAR-4SAR | |
| 100 | JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1/8/CandocrossH25/Ysf1//CM829/CandocrossH25*DURGN1396-49-0Gn IRDWGN-2017-1-0Gn(2018)-0Gn(2)-OSAR-OSAR-4SAR | |
| 101 | CandocrossH25/Ysf1//CM829/CandocrossH25/6/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0*DURGN1396-61-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-1SAR | |
| 102 | CandocrossH25/Ysf1//CM829/CandocrossH25/6/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0*DURGN1396-61-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-3SAR | |
| 103 | Oss11/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12/7/Icarasha2*DURGN1396-62-0GnIRDWGN-2017-1OGn-OGn-OGn-OSAR-OSAR-1SAR | |
| 104 | Oss11/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12/8/JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-64-0Gn-OSAR-OSAR-1SAR | |
| 105 | Oss11/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12/7/Sebatel-2//Wdz6/Gil4*DURGN1396-66-0Gn-OSAR-OSAR-1SAR | |
| 106 | Oss11/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12/7/Sebatel-2//Wdz6/Gil4*DURGN1396-66-0Gn-OSAR-OSAR-5SAR | |
| 107 | JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN/4/ SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37 /7/GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1/8/Sebatel-2//Wdz6/Gil4*DURGN1396-80-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-OSAR-5SAR | |
| 108 | Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0/6/SIMETO/3/SORA/2*PLATA_12//SRN_3/NIGRIS_4/5/TOSKA_26/RAS CON_37//SNITAN/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1*DURGN1396-85-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-OSAR-2SAR | |
| 109 | Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0/6/SIMETO/3/SORA/2*PLATA_12//SRN_3/NIGRIS_4/5/TOSKA_26/RAS CON_37//SNITAN/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1*DURGN1396-85-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-OSAR-4SAR | |
| 110 | Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0/6/SIMETO/3/SORA/2*PLATA_12//SRN_3/NIGRIS_4/5/TOSKA_26/RAS CON_37//SNITAN/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1*DURGN1396-85-0Gn IRDWGN-2017-1OGn-OGn-OGn-OSAR-OSAR-5SAR | |
| 111 | Dehdasht/Icarasha2*DURGN1396-2-0Gn(2018)-0Gn(2019)-3Gn(2020)-OSAR-OSAR-2SAR | |
| 112 | Dehdasht/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9.1*DURGN1396-3-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-1SAR | |
| 113 | Dehdasht/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9.1*DURGN1396-3-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-4SAR | |

Supplementary Table 1. Continued

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| 114 | Dehdasht/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-3-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-5SAR |
| 115 | Dehdasht/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-3-0Gn(2018)-0Gn(2019)-5Gn(2020) -OSAR-OSAR-1SAR |
| 116 | Dehdasht/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-3-0Gn(2018)-0Gn(2019)-5Gn(2020) -OSAR-OSAR-4SAR |
| 117 | Dehdasht/8/JUPAREC2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-SAR |
| 118 | Dehdasht/8/JUPAREC2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-2SAR |
| 119 | Dehdasht/8/JUPAREC2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-4SAR |
| 120 | Dehdasht/8/JUPAREC2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-5SAR |
| 121 | Dehdasht/8/JUPAREC2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn(2018)-0Gn(2019)-8Gn(2020)-OSAR-OSAR-1SAR |
| 122 | Dehdasht/8/JUPAREC2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn(2018)-0Gn(2019)-8Gn(2020)-OSAR-OSAR-2SAR |
| 123 | Dehdasht/8/JUPAREC2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn(2018)-0Gn(2019)-8Gn(2020)-OSAR-OSAR-3SAR |
| 124 | Dehdasht/8/JUPAREC2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37/7/ GUAYACAN INIA/ KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-5-0Gn(2018)-0Gn(2019)-8Gn(2020)-OSAR-OSAR-5SAR |
| 125 | Dehdasht/7/Ossl1/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-6-0Gn(2018)-0Gn(2019)-1Gn(2020)--OSAR-OSAR-3SAR |
| 126 | Dehdasht/3/Sebatel-2//Wdz6/Gil4*DURGN1396-7-0Gn(2018)-0Gn(2019)-4Gn(2020)--OSAR-OSAR-1SAR |
| 127 | Dehdasht/3/Sebatel-2//Wdz6/Gil4*DURGN1396-7-0Gn(2018)-0Gn(2019)-4Gn(2020)--OSAR-OSAR-2SAR |
| 128 | Dehdasht/3/Sebatel-2//Wdz6/Gil4*DURGN1396-7-0Gn(2018)-0Gn(2019)-4Gn(2020)--OSAR-OSAR-5SAR |
| 129 | Dehdasht/3/Sebatel-2//Wdz6/Gil4*DURGN1396-7-0Gn(2018)-0Gn(2019)-5Gn(2020)--OSAR-OSAR-2SAR |
| 130 | Dehdasht/3/Sebatel-2//Wdz6/Gil4*DURGN1396-7-0Gn(2018)-0Gn(2019)-7Gn(2020)--OSAR-OSAR-2SAR |
| 131 | Dehdasht/3/Sebatel-2//Wdz6/Gil4*DURGN1396-7-0Gn(2018)-0Gn(2019)-7Gn(2020)--OSAR-OSAR-3SAR |
| 132 | Dehdasht/3/Sebatel-2//Wdz6/Gil4*DURGN1396-7-0Gn(2018)-0Gn(2019)-8Gn(2020)--OSAR-OSAR-1SAR |
| 133 | Dehdasht/5/Mgn13/Ainzen-1/4/Aghrass-1/3/Mrf1//Mrb16/Ru*DURGN1396-8-0Gn(2018)-OGn(2019)-2Gn(2020)-OSAR-OSAR-1SAR |
| 134 | Dehdasht/5/Mgn13/Ainzen-1/4/Aghrass-1/3/Mrf1//Mrb16/Ru*DURGN1396-8-0Gn(2018)-OGn(2019)-2Gn(2020)-OSAR-OSAR-4SAR |
| 135 | Dehdasht/5/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0*DURGN1396-10-0Gn(2018)-OGn(2019)-2Gn(2020)--OSAR-OSAR-4SAR |
| 136 | Dehdasht/5/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0*DURGN1396-10-0Gn(2018)-OGn(2019)-2Gn(2020)--OSAR-OSAR-4SAR |
| 137 | Dehdasht/5/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0*DURGN1396-10-0Gn(2018)-OGn(2019)-4Gn(2020)--OSAR-OSAR-2SAR |
| 138 | Dehdasht/5/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0*DURGN1396-10-0Gn(2018)-OGn(2019)-4Gn(2020)--OSAR-OSAR-1SAR |

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| 139 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/6/SIMETO/3/SORA/2*PLATA_12//SRN_3/NIGRIS_4/5/TOSKA_26/RASCON_37//SNITAN/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1*DURGN1396-11-0Gn(2018)-0Gn(2019)-4Gn(2020)-OSAR-OSAR-1SAR |
| 140 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/6/SIMETO/3/SORA/2*PLATA_12//SRN_3/NIGRIS_4/5/TOSKA_26/RASCON_37//SNITAN/4/ARMENT//SRN_3/NIGRIS_4/3/CANELO_9.1*DURGN1396-11-0Gn(2018)-0Gn(2019)-4Gn(2020)-OSAR-OSAR-2SAR |
| 141 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-1SAR |
| 142 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn(2018)-0Gn(2019)-1Gn(2020)-OSAR-OSAR-5SAR |
| 143 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn(2018)-OGn(2019)-2Gn(2020)--OSAR-OSAR-2SAR |
| 144 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn(2018)-OGn(2019)-2Gn(2020)--OSAR-OSAR-4SAR |
| 145 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn(2018)-0Gn(2019)-3Gn(2020)--OSAR-OSAR-1SAR |
| 146 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn(2018)-0Gn(2019)-3Gn(2020)--OSAR-OSAR-4SAR |
| 147 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn(2018)-0Gn(2019)-4Gn(2020)--OSAR-OSAR-3SAR |
| 148 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Icarasha2*DURGN1396-12-0Gn(2018)-0Gn(2019)-4Gn(2020)--OSAR-OSAR-4SAR |
| 149 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9.1*DURGN1396-13-0Gn(2018)-0Gn(2019)-3Gn(2020)-OSAR-OSAR-1SAR |
| 150 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9.1*DURGN1396-13-0Gn(2018)-0Gn(2019)-3Gn(2020)-OSAR-OSAR-2SAR |
| 151 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9.1*DURGN1396-13-0Gn(2018)-0Gn(2019)-3Gn(2020)-OSAR-OSAR-4SAR |
| 152 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9.1*DURGN1396-13-0Gn(2018)-0Gn(2019)-8Gn(2020)-OSAR-OSAR-1SAR |
| 153 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/8/JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37// GUAYACAN INIA/KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-14-0Gn(2018)-0Gn(2019)-3Gn(2020)--OSAR-OSAR-2SAR |
| 154 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/8/JUPARE C 2001*2/IM/6/ADAMAR_15//ALBIA_1/ALTAR 84/3/ SNITAN /4/SOMAT_4/INTER_8/5/SOOTY_9/RASCON_37// GUAYACAN INIA/KUCUK/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9.1*DURGN1396-14-0Gn(2018)-0Gn(2019)-3Gn(2020)--OSAR-OSAR-3SAR |
| 155 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicrederaa1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-1Gn(2020)--OSAR-OSAR-1SAR |
| 156 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicrederaa1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-1Gn(2020)--OSAR-OSAR-2SAR |
| 157 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicrederaa1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-4Gn(2020)--OSAR-OSAR-2SAR |
| 158 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicrederaa1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-4Gn(2020)--OSAR-OSAR-5SAR |
| 159 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicrederaa1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-7Gn(2020)--OSAR-OSAR-4SAR |
| 160 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicrederaa1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-7Gn(2020)--OSAR-OSAR-5SAR |
| 161 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicrederaa1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-8Gn(2020)--OSAR-OSAR-1SAR |

Supplementary Table 1. Continued

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| 162 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-8Gn(2020)--OSAR-OSAR-2SAR |
| 163 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/7/Ossl1/Stj5/5/Bicredera1/4/BezaizSHF//SD19539/Waha/3/Stj/Mrb3/6/Icajihan12*DURGN1396-15-0Gn(2018)-0Gn(2019)-8Gn(2020)--OSAR-OSAR-5SAR |
| 164 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Sebatel-2//Wdz6/Gil4*DURGN1396-16-0Gn(2018)-0Gn(2019)-1Gn(2020)--OSAR-OSAR-2SAR |
| 165 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Sebatel-2//Wdz6/Gil4*DURGN1396-16-0Gn(2018)-0Gn(2019)-1Gn(2020)--OSAR-OSAR-5SAR |
| 166 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/4/Sebatel-2//Wdz6/Gil4*DURGN1396-16-0Gn(2018)-0Gn(2019)-7Gn(2020)--OSAR-OSAR-1SAR |
| 167 | ALTAR84/STINT//SILVER_45/3/LLARETAINIA/6/Icaverve*Azeghar1/4/IcamorTA0462/3/Maamouri3//Vitron/Bidra1/5/Mgn13/Ainzen0*DURGN1396-18-0Gn(2018)-0Gn(2019)-4Gn(2020)-OSAR-5SAR |
| 168 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-2Gn(202)-OSAR-1SAR |
| 169 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-2Gn(202)-OSAR-5SAR |
| 170 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-3Gn(202)-OSAR-1SAR |
| 171 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-3Gn(202)-OSAR-5SAR |
| 172 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-4Gn(202)--OSAR-4SAR |
| 173 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-4Gn(202)--OSAR-5SAR |
| 174 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-7Gn(202)--OSAR-4SAR |
| 175 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-7Gn(202)--OSAR-5SAR |
| 176 | BCRIS/BICUM//LLARETAINIA/3/DUKEM_12/2*RASCON_21/5/1A. 1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/NIGRIS_4/3/ CANELO_9 .1/6/BELLAROI/5/1A.1D 5+1-06/3*MOJO//RCOL/4/ARMENT//SRN_3/ NIGRIS_4/3/CANELO_9. 1*DURGN1396-22-0Gn(2018)-0Gn(2019) (2018)-0Gn(2019)-8Gn(202)-OSAR-3SAR |