

Supplementary 2

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Hordeum_vulgare_subsp._vulgare_ (AFP72240.1)---MGSHGKPPLPYAYKPLPSDAA---DGKRTGCMRWSACATVLTASAMVVVVVGGATLLA
    Leymus_chinensis_6-SFT MGSHAMPGKPLPYAYKPLPSGATDDADGQRTGCTRWVCAAVLTASAMVVVVVAAFLA
    Triticum_aestivum_ (BAB82469.1) ---MGSHGKPPLPYAYKPLPSDA----DGERAGCTRWVCAVALTASAMVVVVVGGATLLA
    Triticum_urartu_6-SFT ---MGSHGKPPLPYAYKPLPSDA----DGERTGTRWVCAVLTASAMVVVVVGGATLLA
        Leymus_mollis ---MGSHGKPPLPYAYKPLLSGAAADADGERTDCTRWVCAVLTALAMVVVVVAATLLS
    Dasypyrum_villosum_ (CUM44319.1) ---MGSHGKPPLPYAYKPLPSGAAAADDGERTGCTRWVCAVLTASAMVVVVVAATLLA
    Leymus_racemosus_Lam._Tzvel (AMM03226.1) ---MGSHGKPPLPYAYKPLPSGAAAADDGERTGCTRWVCAVLTASAMVVVVVAATLLA
        Psathyrostachys_huashanica ---MGSHGKPPLPYAYKPLPSGA----DGERTGCTRWVCAVLTASAMVVVVVAATLLA
    Psathyrostachys_huashanica_ (CEP25270.1) ---MGSHGKPPLPYAYKPLPSGA----DGERTGCTRWVCAVLTASAMVVVVVAATLLA
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Hordeum_vulgare_subsp._vulgare_ (AFP72240.1) GLRMEQAVDEEAAAGFPWSNEMLQWQRSGYHFQTAKNYMSDPNGLMYYRGWYHMFYQYN
    Leymus_chinensis_6-SFT GARVDLAVDEEAAGG-FPWSNEMLQWQRSSYHFQTAKNYMSDPDGLLYYRGWYHMFYQYN
    Triticum_aestivum_ (BAB82469.1) GFRVDQAVDEEAAGG-FPWSNEMLQWQRSGYHFQTAKNYMSDPNGLMYYRGWYHMFYQYN
    Triticum_urartu_6-SFT GFRVDQAVDEEAAG-FPWSNEMLQWQRSGYHFQTAKNYMSDPNGLMYYRGWYHMFYQYN
        Leymus_mollis GFRVDQAVNEEAAGG-FPWSNEMLQWQRSGYHYQPAKNYMSDPNGLFYRGWYHMFYQYN
    Dasypyrum_villosum_ (CUM44319.1) GVRFDQAADDEEAAGG-FPWSNEMLQWQRSGYHFQPAKNYMSDPNGLMYYRGWYHMFYQYN
    Leymus_racemosus_Lam._Tzvel (AMM03226.1) GVRFDQAADDEEAAGG-FPWSNEMLQWQRSGYHFQPAKNYMSDPNGLMYYRGWYHMFYQYN
        Psathyrostachys_huashanica GVRFDQAADDEEAAGG-FPWSNEMLQWQRSGYHFQPAKNYMSDPNGLMYYRGWYHMFYQYN
    Psathyrostachys_huashanica_ (CEP25270.1) GVRFDQAADDEEAAGG-FPWSNEMLQWQRSGYHFQPAKNYMSDPNGLMYYRGWYHMFYQYN
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Hordeum_vulgare_subsp._vulgare_ (AFP72240.1) PVGTDWDDGMEWGHAVSRNLVQWRTLPIAMVADQWYDILGVLSGSMTVLPNGTVIMIYTG
    Leymus_chinensis_6-SFT PVGTDWADGMAWGHAVTQNLVQWRTLPIAMKPDQWYDILGVLSGSVTVLPNGTVIMLYTG
    Triticum_aestivum_ (BAB82469.1) PVGTDWDDGMEWGHAVSRNLVQWRTLPIAMVADQWYDILGVLSGSMTVLPNGTVIMIYTG
    Triticum_urartu_6-SFT PVGTDWDDGMEWGHAVSRNLVTWRTLPIAMVADQWYDILGVLSGSMTVLPNGTVIMIYTG
        Leymus_mollis PVGTDWADGMEWGHAVTRNLVQWRTLPIAMKTDQWYDILGVLSGSVTVLPNGTVIMLYTG
    Dasypyrum_villosum_ (CUM44319.1) PVGTDWDDGMEWGHAVSRNLVQWRTLPIAMVADQWYDILGVLSGSMTVLPNGTVIMLYTG
    Leymus_racemosus_Lam._Tzvel (AMM03226.1) PVGTDWDDGMEWGHAVSRNLVQWRTLPIAMVADQWYDILGVLSGSMTVLPNGTVIMLYTG
        Psathyrostachys_huashanica PVGTDWDDGMEWGHAVSRNLVQWRTLPIAMVADQWYDILGVLSGSMTVLPNGTVIMLYTG
    Psathyrostachys_huashanica_ (CEP25270.1) PVGTDWDDGMEWGHAVSRNLVQWRTLPIAMVADQWYDILGVLSGSMTVLPNGTVIMLYTG
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Hordeum_vulgare_subsp._vulgare_ (AFP72240.1) ATNASAVEVQCIATPADPNDPDLRRWTKHPANPVIWSPPGVGTKDFRDPMTAWYDESDDT
    Leymus_chinensis_6-SFT ATNDWYVEATCLALPADPNDPDLRRWTKHPANPIIWSPPGIGTKDFRDPMTAWYDSDHT
    Triticum_aestivum_ (BAB82469.1) ATNASAVEVQCIATPADPTDPLRRWTKHPANPVIWSPPGVGTKDFRDPMTAWYDESDDT
    Triticum_urartu_6-SFT ATNASAVEVQCIATPADPNDPDLRRWTKHPANPVIWSPPGIGTKDFRDPMTAWYDESDDT
        Leymus_mollis ATNNWYVEATCLALPADPNDPDLRRWTKHPANPIIWSPPGIGTKDFRDPMTAWYDSDHT
    Dasypyrum_villosum_ (CUM44319.1) ATNASAVEVQCIATPADPNDPDLRRWTKHPANPVIWSPAGVGTKDFRDPMTAWYDESDDT
    Leymus_racemosus_Lam._Tzvel (AMM03226.1) ATNASAVEVQCIATPADPNDPDLRRWTKHPANPVIWSPAGVGTKDFRDPMTAWYDESDDT
        Psathyrostachys_huashanica ATNASAVEVQCIATPADPADPDLRRWTKHPANPIIWSPSGVGTKDFRDPMTAWYDESDDT
    Psathyrostachys_huashanica_ (CEP25270.1) ATNASAVEVQCIATPADPADPDLRRWTKHPANPIIWSPSGVGTKDFRDPMTAWYDESDDT
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Hordeum_vulgare_subsp._vulgare_ (AFP72240.1) WRTLLGSKDDHGHHDGIAMMYKTKDFLNYELIPGILHRVVRTGEWECIDFYFVGRRSSD
    Leymus_chinensis_6-SFT WRTLFGSKDDHNGHHDGIAMMYKTKDFLNYELIPGILHRVENTGEWECIDFYFVAGGGGSE
    Triticum_aestivum_ (BAB82469.1) WRTLLGSKDDNNGHHDGIAMMYKTKDFLNYELIPGILHRVERTGEWECIDFYFVGERTSD
    Triticum_urartu_6-SFT WRTLLGSKDDHGHHDGIAMMYKTKDFLNYELIPGILHRVQRTGEWECIDFYFVGHRTSD
        Leymus_mollis WRTLFGSKDDHNGHHDGIAMMYKTKDFLNYELIPGILHRVENTGEWECIDFYFVPGSGGSE
    Dasypyrum_villosum_ (CUM44319.1) WRTLLGSKDDHGHHDGIAMMYKTKDFLNYELIPGILHRVENTGEWECIDFYFVGRSGND
    Leymus_racemosus_Lam._Tzvel (AMM03226.1) WRTLLGSKDDHGHHDGIAMMYKTKDFLNYELIPGILHRVENTGEWECIDFYFVGRSGND
        Psathyrostachys_huashanica WRTLLGSKDDHGHHDGIAMMYKTKDFLNYELIPGILHRVENTGEWECIDFYFVGRSGSD
    Psathyrostachys_huashanica_ (CEP25270.1) WRTLLGSKDDHGHHDGIAMMYKTKDFLNYELIPGILHRVENTGEWECIDFYFVGRSGSD
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Hordeum_vulgare_subsp._vulgare_ (AFP72240.1) NSSEMLHVLKASMDDERHDYSLGTYDSAANTWTPIDPELDLIGLRYDWGKFYASTSFY
    Leymus_chinensis_6-SFT NSSEVLHVLKASMDDERHDYSLGRYDAAANTWTPIDSEADLIGLRYDWGKFYASTTFY
    Triticum_aestivum_ (BAB82469.1) NSSEMLHVLKASMDDERHDYSLGTYDSAANRWTPIDGLGLRYDWGKFYASTSFY
    Triticum_urartu_6-SFT NSSEMLHVLKASMDDERHDYSLGTYDSAANTWTPIDPELDLIGLRYDWGKFYASTSFY
        Leymus_mollis NSSEVLHVLKASMDDERHDYSLGRYDAGANKWTPIDPEADLIGLRYDWGKFYASTTFY
    Dasypyrum_villosum_ (CUM44319.1) NSSEMLHVLKASMDHDERHDYSLGRYDSAANTWTPIDPELDLIGLRYDWGKFYASTTFY
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