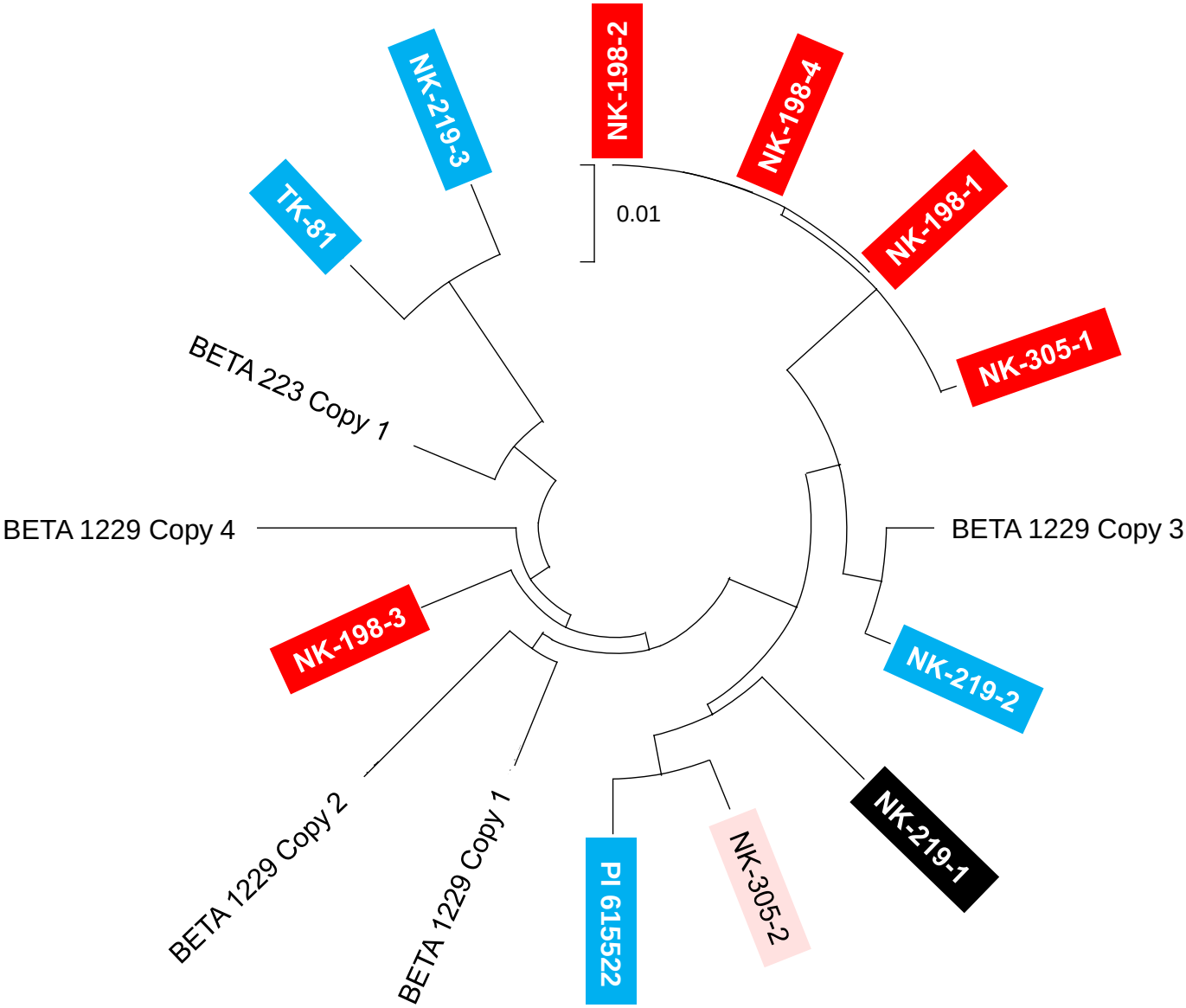

Fig. S3 Neighbor-Joining tree of orf20-like ORFs constructed by using the nucleotide sequence of amino acid coding regions and introns. Labels are as follows (see also Arakawa et al. 2020a): NK-198-1, *orf20* $_{NK198-1}$; NK-198-2, *orf20* $_{NK198-2}$; NK-198-3, *orf20* $_{NK198-3}$; NK-198-4, *orf20* $_{NK198-4}$; NK-219-1, *orf20* $_{NK219-1}$; NK-219-2, *orf20* $_{NK219-2}$; NK-219-3, *orf20* $_{NK219-3}$; NK-305-1, *orf20* $_{NK305-1}$; NK-305-2, *orf20* $_{NK305-2}$; PI 615522, *orf20* $_{PI\ 615522}$; and TK-81, *orf20* $_{TK-81}$. Copies from dominant- and semidominant Rf1 haplotypes are highlighted in red. Those from recessive rf1 haplotypes are highlighted in blue. Identified copies in this study are: BETA 1229 Copy 1, BETA 1229 p5B Copy 1; BETA 1229 Copy 2, BETA 1229 p5B Copy 2; BETA 1229 Copy 3, BETA 1229 p5B Copy 3; BETA 1229 Copy 4, BETA 1229 p5B Copy 4; and BETA 223 Copy 1, BETA 223 p3 Copy1.

‘**Differences in the frequency of restorer-of-fertility 1 haplotype are associated with crop history of garden beet and sugar beet (Beta vulgaris L.)**’

Molecular Breeding

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