

Supplementary Material

1 SUPPLEMENTARY DATA

1.1 Figures

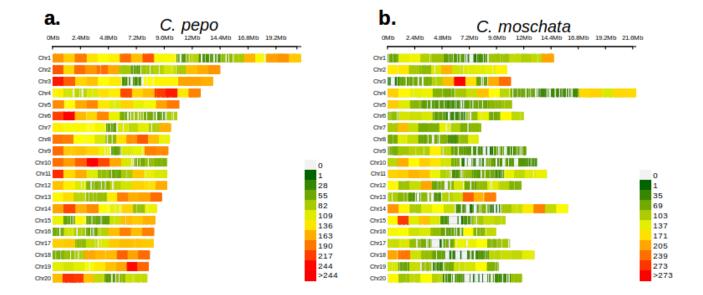




Figure S1. Geographical distribution of the USDA *Cucurbita* ssp. collection. The size of the pie chart is scaled according to the number of accessions. Sector areas correspond to the proportion of the three species.

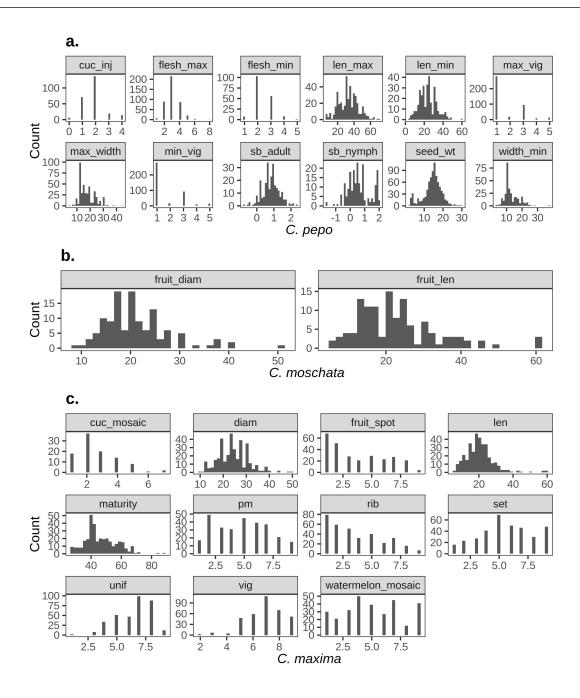


Figure S2. Histograms of continuous and ordinal traits for **Panel a.** *C. pepo*, **Panel b.** *C. moschata*, and **Panel c.** *C. maxima*.

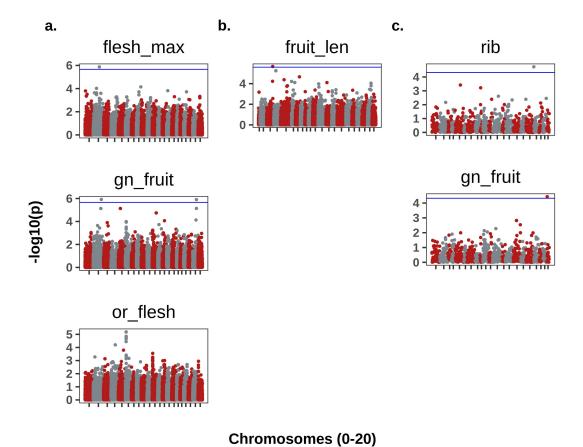


Figure S3. GWAS results for Panel a. C. pepo, Panel b. C. moschata, and Panel c. C. maxima.

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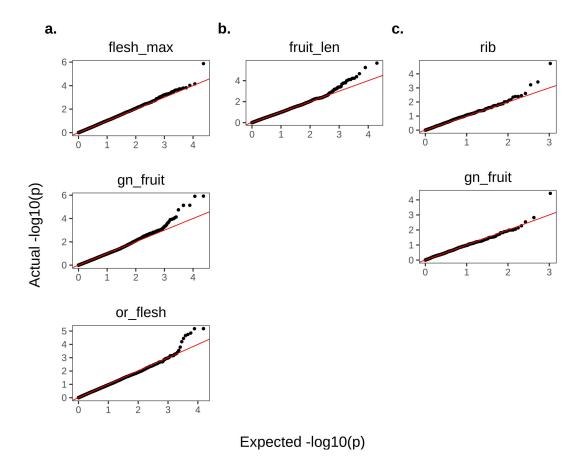


Figure S4. Q-Q plots for GWAS results for **Panel a.** *C. pepo*, **Panel b.** *C. moschata*, and **Panel c.** *C. maxima*.

1.2 Tables

| Trait | Species | Chrom | Pos | Alleles |
|-------------|-------------|------------------|----------|---------|
| plant_type | C. pepo | 6 | 3962527 | G/C |
| | | 10 | 3507098 | C/T |
| | | 10 | 3507179 | G/T |
| | | 10 | 3507087 | A/G |
| | | 10 | 3507387 | C/T |
| plant_type2 | C. pepo | 10 | 679593 | A/C |
| 1 71 | 1 1 | 10 | 753000 | T/C |
| | | 10 | 768265 | T/C |
| | | 10 | 666810 | T/C |
| | | 10 | 974041 | G/A |
| gn_fruit | C. pepo | 1 | 17395123 | C/T |
| C | 1 1 | 19 | 6509248 | A/G |
| | | 19 | 6509202 | T/C |
| | | 1 | 16658797 | G/C |
| | | 4 | 5142030 | C/T |
| or_flesh | C. pepo | 5 | 1075625 | A/T |
| | 1 1 | 5 | 1075652 | T/G |
| | | 5 | 1074883 | T/C |
| | | 5 | 1072306 | G/T |
| | | 5 5 5 5 | 1115573 | C/T |
| flesh_max | C. pepo | 1 | 10063336 | C/T |
| | 1 1 | 7 | 9444225 | T/A |
| | | 1 | 5697024 | C/T |
| | | 13 | 2248185 | G/A |
| | | 0 | 1463850 | G/A |
| fruit_len | C. moschata | 2 | 9116220 | T/C |
| | | 3 | 5539269 | T/A |
| | | 3 | 5539270 | T/A |
| | | 6 | 10461612 | C/T |
| | | 4 | 6338885 | C/T |
| rib | C. maxima | 17 | 76012 | T/C |
| | | 4 | 8332568 | C/T |
| | | 8 | 1759117 | A/T |
| | | 11 | 6776288 | A/G |
| | | 19 | 8123733 | A/C |
| gn_fruit | C. maxima | 20 | 1087480 | G/A |
| _ | | 14 | 9051301 | G/T |
| | | 14 | 9051304 | A/T |
| | | 14 | 14410557 | C/T |
| | | 11 | 3829766 | C/T |

Table S1. The position and allele are shown for the top five association results for each trait for which there was a GWAS signal.

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