



**SUPPLEMENTARY FIG. S7.** Graphical user interface generated by the algorithm in GLYMMR with parameters set to  $m=3$ , normal sorting, according to Figure 2 for the motifs of UEA-I. **(A)** Not filtered to remove the subsets of identical structures. **(B)** Filtered to remove the subsets of identical structures. The designation Con A\_3-4.0 is generated using the dropdown menu to select what data to display from v4.0 of the array. “View motifs” is a command field. Checking the box labeled “Filter sub-structures” filters the results **(B)**. The  $m$  value [#Non-Binders ( $m$ )] can be 3–14, selected from the dropdown menu. The sorting method may also be modified, but is not demonstrated here. A single-letter code for the glycan structures is presented (S, Neu5Ac; L, Gal; N, GlcNAc; A, GalNAc; M, Man; F, Fuc; G, Glc). The numbers are the linkage position on the monosaccharide to the right of the number, and  $a=\alpha$  and  $b=\beta$ . Below the single-letter designation of each oligosaccharide, the underlined numbers indicate the number of binding glycans on the array that possess the displayed motif (binders), and the number of non-binding glycans (non-binders) on the array that possess the displayed motif (binders).