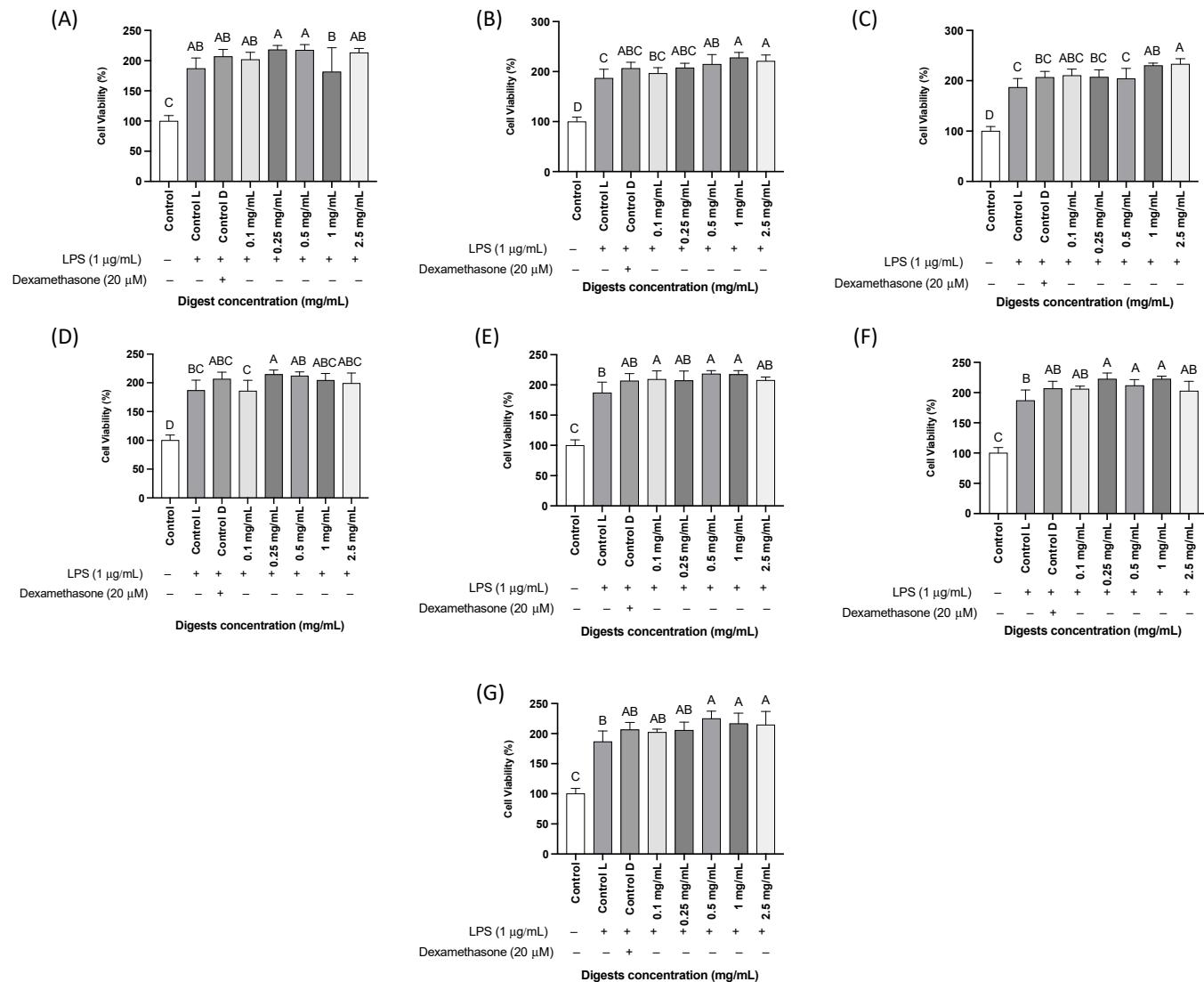


**Supplemental Figure S1.** The proportion of each protein content expressed as a percentage of total protein content (A)  $\beta$ -conglycinin subunits  $\alpha$  and  $\alpha'$  (B) Glycinin A5 (C)  $\beta$ -conglycinin  $\beta$  (D) Glycinin A1, 2, 4 (E) Glycinin B1, 2, 4 (F) Kunitz Trypsin Inhibitor (G) LOX (H) Bowman-Birk Inhibitor. Results are arranged from highest to lowest. Bars with different letters represent statistically significant differences according to one-way ANOVA and Tukey's multiple comparison tests ( $p < 0.05$ ).



**Supplemental Figure S2.** Cell viability of different digests concentrations for the varieties (A) 81, (B) 87, (C) 96, (D) 103, (E) 108, (F) GN1 and (G) GN3. NS = no significance  $p > 0.05$ . The assay was done at least in duplicates. Data were analyzed using ANOVA (one-way) and Tukey's post hoc test. Bars with different letters represent statistically significant differences ( $p < 0.05$ )

**Supplementary Table S1.** Identification of proteins in soybean varieties and their respective approximate molecular weight ranges.

Protein	Molecular Weight (kDa)
Lipoxygenase	90 – 95
$\beta$ -conglycinin $\alpha'$	57 – 72
$\beta$ -conglycinin $\alpha$	57 – 68
$\beta$ -amylase	61.5 – 63
$\beta$ -conglycinin $\beta$	45 – 52
Glycinin acidic subunit	10 – 15, 30 – 38, 42 – 44
Kunitz trypsin inhibitor (KTI)	21.5 – 22.5
Glycinin basic subunit	18 – 20
Bowman-Birk inhibitor (BBI)	8 – 10