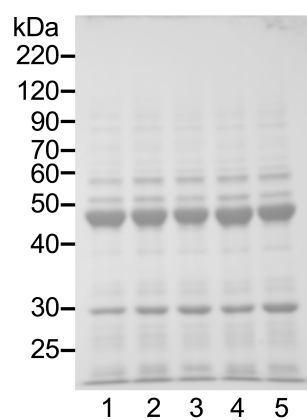


Supplemental Table 1. Sizes and weights of dried sword beans

	Long axis (cm)	Minor axis (cm)	Thickness (cm)	Weight (g)
WSB	2.72 ± 0.13	1.45 ± 0.08	1.16 ± 0.09	2.38 ± 0.36
RSB	$2.99 \pm 0.18^*$	$1.69 \pm 0.13^*$	1.14 ± 0.11	$2.63 \pm 0.37^*$

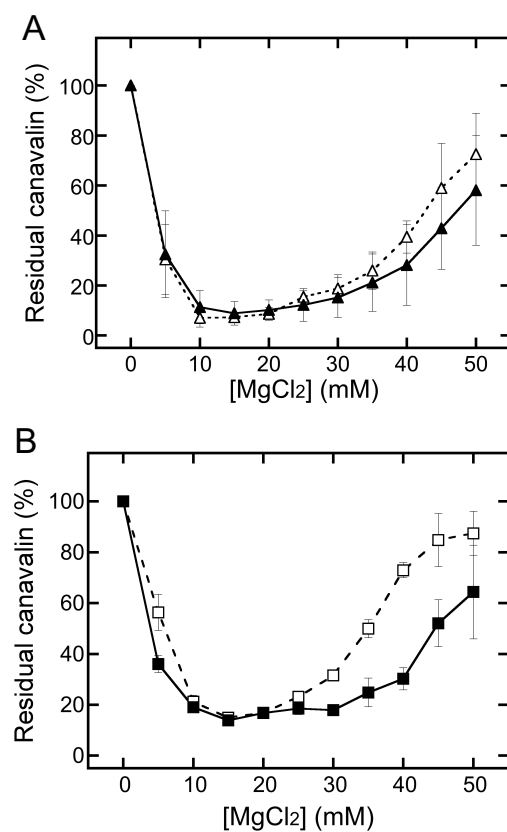
The data shown represent the average \pm standard deviation of 100 randomly selected beans.

*, Differences with $p < 0.05$ between RSB and WSB determined by t -testing were considered statistically significant.



Supplemental Figure 1. Extracted proteins of sword beans by different procedures.

Sword bean proteins were separated by SDS-PAGE (10% polyacrylamine). Ten micrograms of sword bean proteins from each extract were electrophoresed and stained with Coomassie Brilliant Blue R-250. Wxtracts were prepared from soaked WSBs(lane 1), drilled and soaked WSBs (lane 2) and RSBs (lane 3), and milled WSBs (lane 4) and RSBs (lane 5).



Supplemental Figure 2. Extracted proteins of sword beans by different procedures.

In drilled beans (A) and milled beans (B), for the comparison of changes between WSBs and RSBs, the data shown were replotted from the data in Figure 1A and 1B. Open and closed symbols indicate WSBs and RSBs, respectively. The triangles indicate drilled and soaked beans. The squares represent milled beans. Data are expressed as the average \pm standard deviation of three independent experiments.