

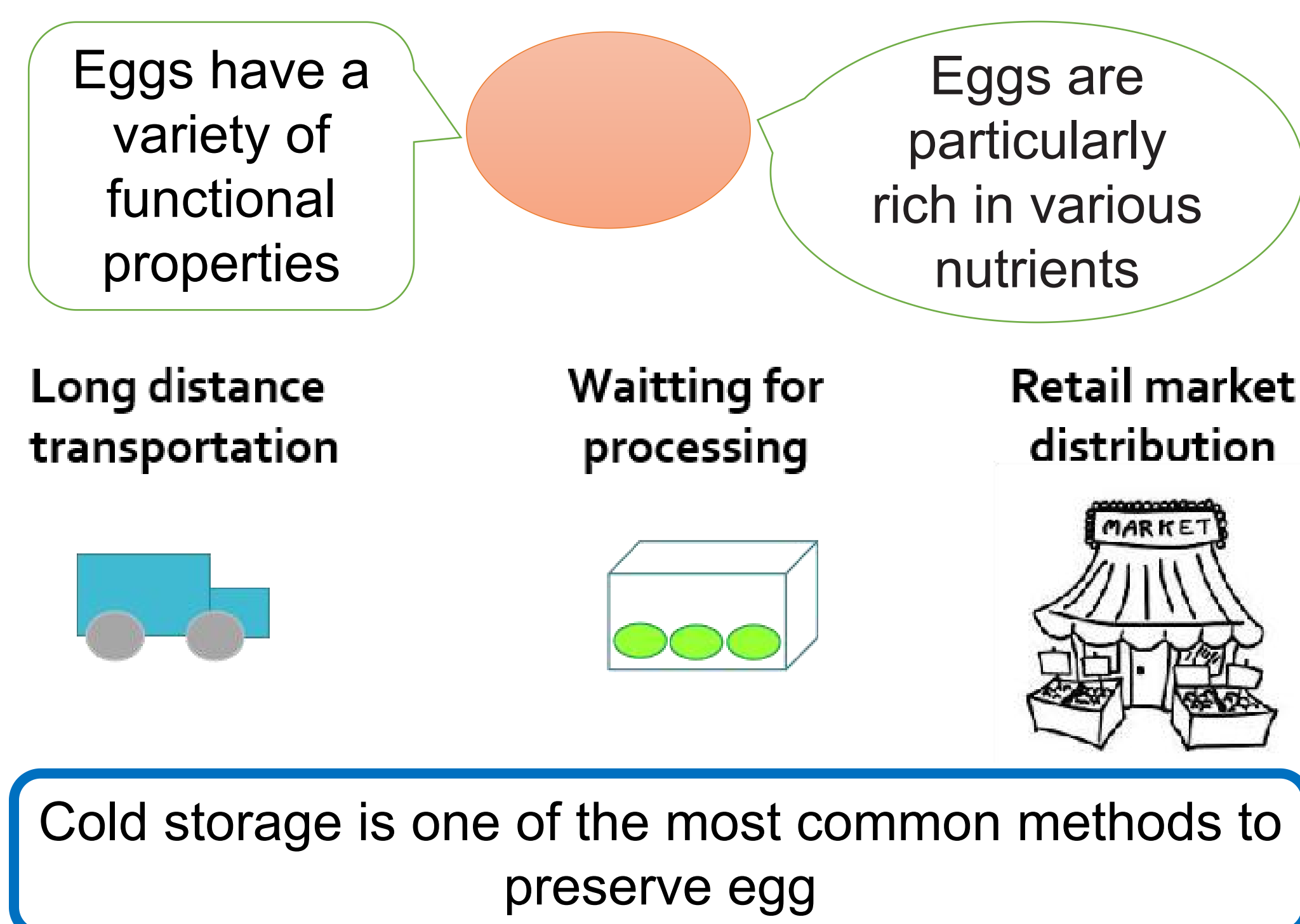
EFFECTS OF COLD STORAGE ON THE FRESHNESS OF EGG AND MICROCRACKS OF EGGSHELL

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1. Introduction



2. Materials and methods

255 eggs size M were used in the experiment. For each group, 60 eggs were selected randomly for the experiment. Every week of storage time, 15 eggs were taken from each group for measurements of weight loss (%), Haugh unit and eggshell image by Scanning Electron Microscope (SEM).

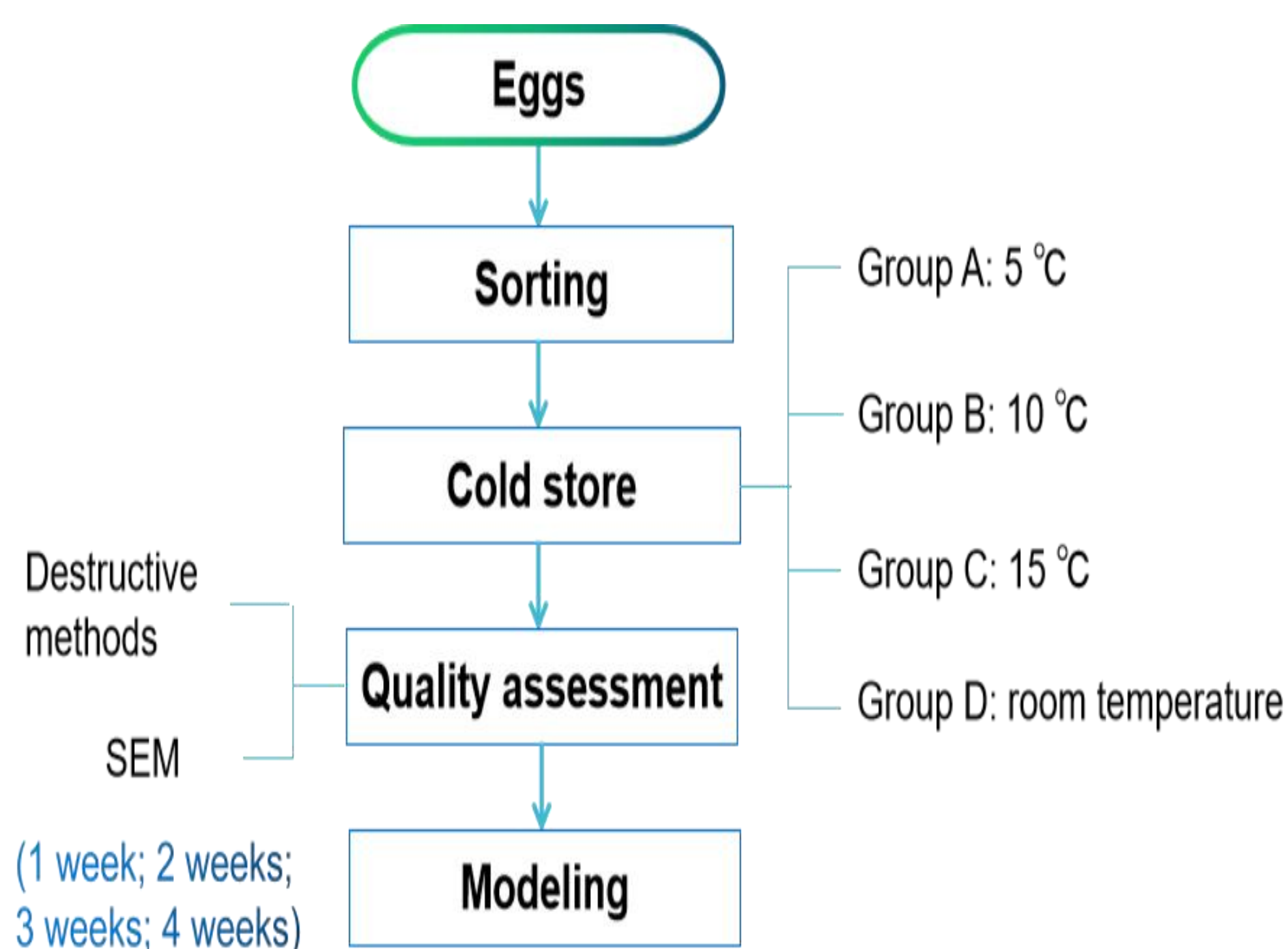


Fig 1. Design of experiment

3. Results

3.1. Effects of storage temperatures on the weight loss

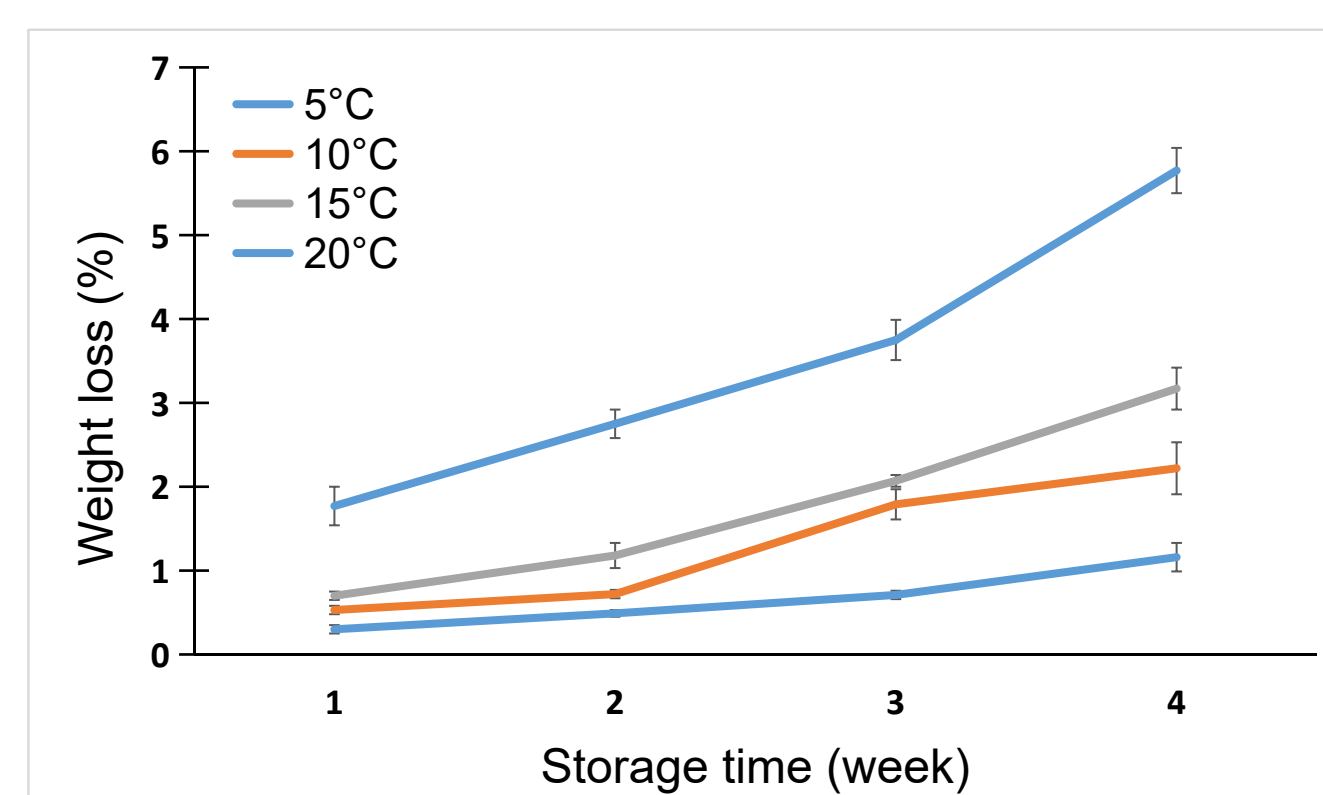


Fig 2. Effects of storage temperatures on the weight loss

3.2. Effects of storage temperatures on Haugh unit

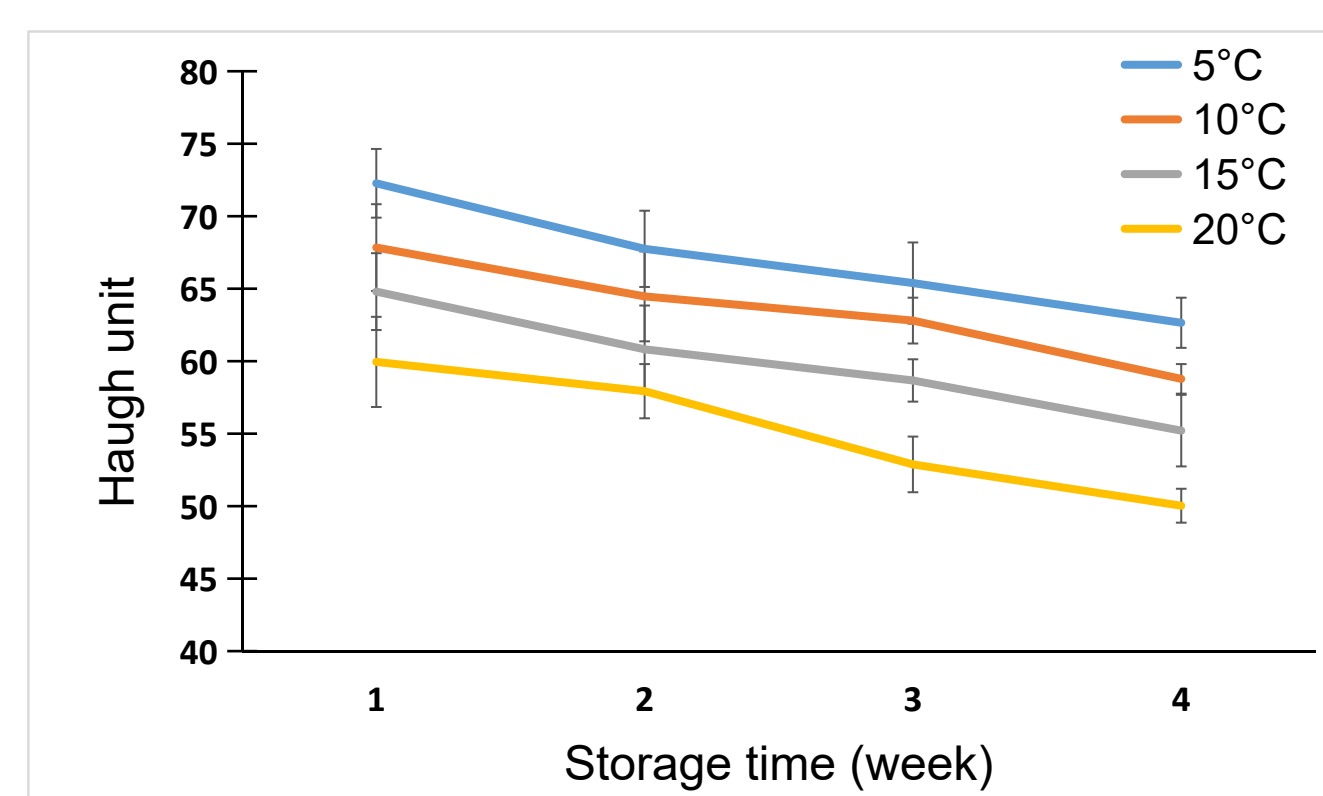


Fig 3. Effects of storage temperatures on Haugh unit

3.3. Effects of storage temperatures on microcrack of eggshell

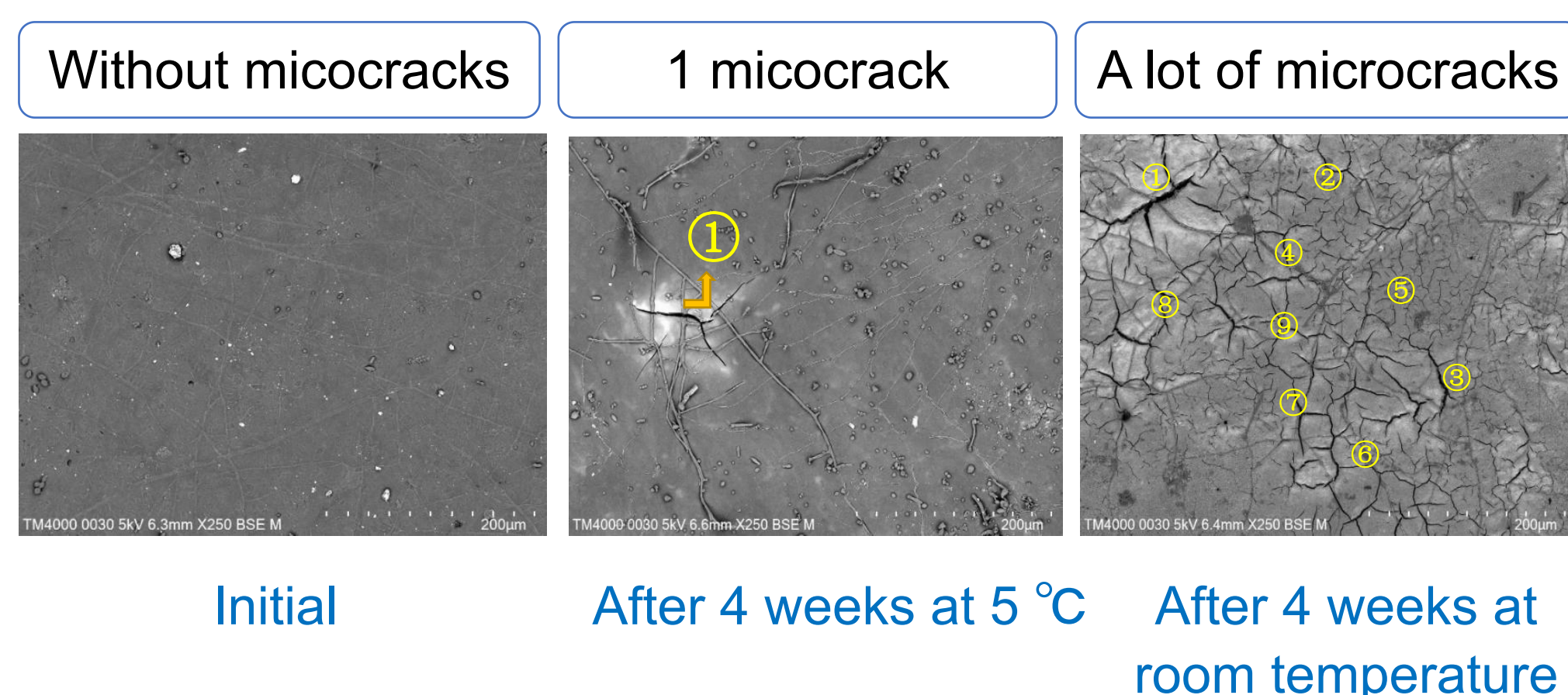


Fig 4. Effects of storage temperatures on microcrack of eggshell

4. Conclusion

Based on the results, both storage time and temperature had significant effects on the freshness of eggs. After 4 weeks, eggs stored at 5 °C had the best quality. The rise of microcracks on eggshell was observed with increase of storage time and temperature.