

The Effect of using Different Filter Aid Materials on the Oil Yield during Winterization Process

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In this study, the effect of using different filter aid materials in different ratios (0.3 % and 0.6%) on the sunflower and corn oils yields were evaluated during winterization process. For this purpose the oil samples were winterized before and after adding filter aid materials and then the obtained results were compared. The period for winterization process was 24 hours. Experiments were realized in a pilot plant winterization unit having a capacity of 50 L. Oil yield was determined by calculating of total oil volume before and after winterization process. According to the obtained results, the effect of using different filter aid materials on the oil yield was found statistically important ($p < 0.05$). When the oil loss was quite low in winterization without using filter aid materials, it was found higher in winterization by using kieselghur than winterization by using perlite. The oil yield of sunflower and corn oils winterized by using 0.3% and 0.6% kieselghur were 95.2%95.9% and 94.6%96.8%, respectively.

Key words: oil yield, corn oil, sunflower oil, winterization