

CELLULOSE SEPARATION PROCESS BASED ON LOCAL RAW MATERIALS – A STUDY OF THE INFLUENCE OF VARIOUS PARAMETERS

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Abstract

This article is about the issue of developing the linguistic competence of primary school students in terms of adjective vocabulary in their native language classes, as well as the methods used to form linguistic competence in the adjective vocabulary of primary school students. provides theoretical information and analyzes these methods.

Keywords: Competence, linguistic competence, linguistic analysis, phonetics, quality, grammatical analysis.

INTRODUCTION

Cotton is a valuable plant, and up to 200-250 types of consumer goods and technical products are obtained from its fiber, seed and other parts. Currently, the areas where cotton is grown in our republic are not provided with enough organic nutrition. As a result, plants suffer from a deficiency of microelements and a decrease in yield due to a slowdown in physiological processes. For information, cotton is grown mainly for fiber. From 1 ton of cotton raw material, an average of 320-340 kg. of fiber and 560-580 kg. of seed are obtained. From 340 kg. of fiber, in turn, 3500-4000 square meters of fabric are produced, and from seed, 112 kg. of oil, 10 kg. of soap, 270 kg. of cocoons, 170 kg. of husks and 8 kg. of lint (cotton) are produced. Cotton accounts for more than 60 percent of the world's textile fiber production. From its fiber, yarn (kalava) is mainly spun, textiles, clothing and hygroscopic cotton are made. It is widely used in aviation, automobile, electrical and other industries. Many products are made from the fiber, such as cotton thread, kirza, hose, belt, film and writing paper.

From seed pressing and extraction way with cottonseed oil is taken . Oil is food and for technical purposes is used . From him soap in cooking , alif , varnish, enamel and other paints work in production is used .

Seed Contains gossypol pigment (a toxic organic compound) and is used to extract oil in the process separately is taken and from it both various synthetic substances work is issued . Oil production in production residual -tar use for people household to the networks will be sent . Chigit husk and shruti cattle for food from being In addition , potash, a fertilizer in industry substances , alcohol, paper , cardboard , etc other many products is being taken . Even cotton to make a sound and food protein is separated .

Cotton more than 100 per bush associations to take can The leaves contain 20 different organic acids , including valuable ones apple and citric acids is taken . Also vitamin, stimulant, amino acid, trace element cleaning factories in the waste occurs . Stem, from the groin from fuel except , construction material as wide use possible .

The technology of processing lignin-based alkali sludge as a stabilizing reagent and inhibitor in the modification of barite weighting agents with improved properties for drilling fluids in the oil and gas industry, as well as for the extraction of cellulose from fibrous waste from cotton mills and textile enterprises, has been mastered.

Initially, cellulose extraction processes were carried out using the soda method.

It can be observed that the effect of alkali solution on some quality parameters, including ash content, α -cellulose, whiteness level, and on the contrary, its polymerization level, is positive and has a negative effect on it. In this case, the alkali concentration for cotton pulp was chosen as 40 g/l as optimal. Based on this parameter, the cellulose yield is 36.1%, α -cellulose is 89.5%, and the polymerization level is 600.

Table 1 Cotton stalk: Cellulose the concentration of NaOH
impact on quality indicators
(boiling time 240 minutes, 5 atm, 150 °C)

| Cotton stalk: Cellulose the concentration of NaOH impact on quality indicators (boiling time 240 minutes, 5 atm, 150 °C) | | | | | | | | | |
|--|------------------|------------------------------|-----|---------------------------------|--------------------|-------------------------|------------------------|------|-------------------|
| No. | NaOH , g/l | Boil - tooth t, minute | °C | Quality indicators of cellulose | | | | | |
| | | | | Target yield, % | humidity , % | k ul miq - ri , % | α -target, % | * PD | Arrow level, % |
| 1 | 20 | 240 | 150 | - | - | - | - | - | - |
| 2 | 30 | 240 | 150 | 18.5 | 4.1 | 9.7 | 71.1 | 720 | 61 |
| 3 | 40 | 240 | 150 | 36.1 | 4.1 | 6.1 | 89.5 | 710 | 72 |
| 4 | 50 | 240 | 150 | 35.8 | 3.4 | 5.7 | 90.8 | 510 | 77 |
| 5 | 60 | 240 | 150 | 31.2 | 4.1 | 4.8 | 91.4 | 390 | 82 |
| Gum belt: alkaline cooking time cellulose impact on quality indicators (NaOH 30g/l, 3atm, 130 °C) | | | | | | | | | |
| 1 | 40 | 120 | 150 | - | - | - | - | - | - |
| 2 | 40 | 180 | 150 | 27.2 | 4.3 | 10.7 | 72.3 | 740 | 60 |
| 3 | 40 | 240 | 150 | 36.1 | 4.1 | 6.1 | 89.5 | 600 | 72 |
| 4 | 40 | 300 | 150 | 34.1 | 3.5 | 5.9 | 91.8 | 480 | 74 |
| 5 | 40 | 360 | 150 | 29.0 | 4.7 | 3.8 | 92.8 | 310 | 82 |

* PD- polymerization degrees

During the soda cooking process, it was possible to extract cellulose from all parts of the cotton stalk. During the research, the complex processing processes of the cotton stalk were studied. The table below shows the chemical composition of the cotton stalk and some quality indicators of cellulose obtained from its various parts.

Table 2 Chemical composition of the stem and some quality indicators of the cellulose obtained from its different parts

| N o. | Indicators | Components of the gourd | | | |
|---------|--------------------------|-------------------------|---------------------|---------------------|----------------------------------|
| | | Cotton stem part | Cotton husk part | The pelvic floor | The woody part of the stem |
| 1 | Cellulose, % | 59.2 | 54.2 | 56.1 | 65.7 |
| 2 | Ash content, % | 4.21 | 6.11 | 5.27 | 6.02 |
| 3 | Bullying | 145 | 140 | 150 | 155 |
| 4 | Degree of polymerization | 680 | 590 | 610 | 705 |
| 5 | Water extracted part | 8.74 | 11.9 | 11.94 | 4.1 |
| 6 | Amount of lignin, % | 23.54 | 25.01 | 22.08 | 26.98 |
| 7 | α -cellulose, % | 89.5 | 87.6 | 88.7 | 90.1 |
| 8 | Humidity level, % | 4.2 | 5.1 | 3.9 | 4.6 |

It can be seen from the table that the components of the cotton boll have different quality indicators, mainly the degree of polymerization and its ash content, porosity, and moisture content. The average ash content of the cotton boll is 4.21, while other parts have a higher ash content.

The amount of water-extracted polysaccharides varies in the parts of the cotton boll, and while it is 4.1 in the wood pulp, it is observed that it is relatively high in the bark and stipules.