Potential of Innovative Product from Omani Date Syrup

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Methods to produce date syrup

- Traditional
  - Stacked date fruit bag
  - Subjecting to hot water (Thermal extraction)

- Commercial
  - Industrial scale
Traditional
Dates are mixed with water at ratio of 1:1

Boiled (1½ hour)

Filtered

Press cake

Feed for animal

Syrup

Concentration

Collected in bottles

www.feedspot.com
Industrial Scale

- Dried dates
- Pitting of the date pits
- Paste
- Mixing with water
- Filtering
- Concentrating evaporator (at 60–80°C)
- Packaging
- Sold or stored at room temperature
<table>
<thead>
<tr>
<th>Physicochemical Characteristics (g/100g)</th>
<th>Date fruit syrup</th>
<th>Date set syrup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water content</td>
<td>17.31±0.72</td>
<td>18.5±0.7</td>
</tr>
<tr>
<td>Glucose</td>
<td>35.6±1.1</td>
<td>35.6±1.0</td>
</tr>
<tr>
<td>Fructose</td>
<td>35.6±0.4</td>
<td>35.4±1.0</td>
</tr>
<tr>
<td>Carbohydrate</td>
<td>71.2±1.4</td>
<td>71.0±0.7</td>
</tr>
<tr>
<td>Ash</td>
<td>1.9±0.1</td>
<td>1.72±0.1</td>
</tr>
<tr>
<td>Pectin</td>
<td>0.77±0.6</td>
<td>0.77±0.08</td>
</tr>
<tr>
<td>Minerals (Mg, Ca, NA, P, K)</td>
<td>508 ± 40 mg/L</td>
<td>471 ± 46 mg/L</td>
</tr>
</tbody>
</table>
Main innovation and potentials

Innovation consists of

• New product date-set-syrup
  • very appealing in terms of color, texture and spread-ability

• Processing conditions
  • Optimum temperature of sugar crystallization, developing seeds, seed-syrup mass ratio, mixing methods and crystallization time
The new innovative processing method could be used

- By the date-processing industry to produce a new product as Date-Set-Syrup.

- Will have high market value as compared to the syrup.

- Could diversify the product lines of the date fruits and will be economically beneficial to the date fruit industry.
METHOD OF MAKING SET-DATE SYRUP

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Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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Field of Classification Search CPC A23K 11/00
See application file for complete search history.

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ABSTRACT

A method of making set-date syrup can transform unprocessed (uncrystallized) date syrup into a set-date syrup. The method can include controlled crystallization of the sugars in the unprocessed date syrup. A portion of the unprocessed syrup can be used to produce a seed batch. The seed batch can be made by allowing the unprocessed date syrup to crystallize. The seed batch can then be mixed with an amount of unprocessed syrup in appropriate proportions to provide a mixture. The mixture can be maintained for a period of one to seven days at a temperature ranging from about −20° C. to about 15° C. to provide the set-date syrup.

5 Claims, No Drawings