In-vivo 
Skin Moisturization Assay

The results indicated that ABS Imperata Cylindrica Extract PF is capable of increasing the level of skin moisturization by almost 45%, which is 88% more effective than the untreated control. Furthermore, the test product also enhanced moisture levels by 53% more effectively than the O/W base emulsion alone. The assay illustrates that it is possible to make moisturization claims, both as a means to enhance a formulation and for consumers to experience proven, long-term moisturization, when incorporating ABS Imperata Cylindrica Extract PF in a cosmetic or personal care formulation.
Abstract:

Over the course of a thirty-day period 12 subjects were used to analyze the long-term moisturizing effects of ABS Imperata Cylindrica Extract on the skin.

Materials and Methods:

The moisturization benefits of 5% ABS Imperata Cylindrica were compared to the biological control.

Test Product: Blank Formulation Base (Water) + 5% ABS Imperata Cylindrica

A nova Impedance Meter was used to determine skin moisturization levels on 12 subjects (M/F) between the ages of 23 and 45. This measurement was considered to be the volunteers’ baseline. The subjects were then given the test product to apply to the right side of their face while the left side remained untreated as the biological control. Test subjects were asked to apply the test formulation once daily for a period of 30 days.

Following the completion of the study on day 30, subjects skin moisturization was again measured using the Nova Impedence Meter. Moisturization levels were compared to the baseline measurements.

Results:

<table>
<thead>
<tr>
<th></th>
<th>Mean Moisturization Value on Day 1</th>
<th>Mean Moisturization Value on Day 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS Imperata Cylindrica Extract</td>
<td>4.58</td>
<td>42.36</td>
</tr>
<tr>
<td>Biological Control</td>
<td>4.58</td>
<td>4.59</td>
</tr>
</tbody>
</table>
Discussion:

The results indicate that ABS Cylindrica Imperata Extract is capable of increasing average level of skin moisturization by almost 45% when compared to the biological control. The assay illustrates that it is possible to make long-term moisturization claims based on the incorporation of ABS Cylindrica Imperata Extract in a cosmetic or personal care formulation.