Traditional Medicinal Plants of K. Maras (Turkey)

Sengul Karaman and Yusuf Ziya Kocabas

This paper presents a list of some medicinal and aromatic plants in the K.Maras province of Turkey. During the ethnobotanical survey of 88 plants belonging to 47 families were obtained in the period of 1999. It has been found that these plants are mostly used for antiseptic, diuretic, stomach and wound.

Key words: Folk medicine, medicinal plants, K.Maras, Turkey
Karaman and Kocabas: Traditional Medicinal Plants of K. Maras (Turkey)

Introduction
Today there is a much renewed interest in searching of the plant kingdom for new medicines, agrochemicals and other marketable products. Many of the companies and institutions are involved in this new search and are using ethnomedical information as a clue, to which plants come candidates for further screening and chemical analyses (France, 1991). Plants used for traditional medicines contain a wide range of substances to treat chronic as well as infectious diseases. The substances that can either inhibit the growth of microorganisms or kill them are considered for developing new drugs for treatment of various infectious diseases. Ethnomedical record has recently been collected and the knowledge about them is still increasing.

Herbal medicines have been improved in developing countries, as an alternative solution to health problems and costs of pharmaceutical products (Ninmi et al., 1998). Modern pharmacological studies have shown that at least 25% drugs derived from plants. China, India, Sri Lanka and few other countries have national health care delivery systems. Herbal medicines have occupied an important position in China and India. Turkey has a great potential due to existing plant diversity in its natural flora and very distinct forms of primitive cultivars and land races (Tan, 1992; Sealk, 1991). In Turkey more than 5000 plant (totally 10000 plants) species are used as medicinal and aromatic plants. Especially native people are still using the traditional medicines. The aim of this study was to carry out an ethnomedical survey which would enable a preliminary classification of the plants employed in traditional medicine.

Materials and Methods
The research materials consist of plant specimens which were collected during the field studies of K. Maras province a different vegetation periods in 1999. Plant materials were deposited at the department of Biology, Faculty of Science, University of K.S.U. The identification of specimens was carried out using Flora of Turkey (Davis, 1982).

<table>
<thead>
<tr>
<th>Sample number</th>
<th>Family, botanical name</th>
<th>Local name</th>
<th>Part Used</th>
<th>Claimed therapeutic uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arecaudaceae, Areca caina</td>
<td>Suvak</td>
<td>Fruit</td>
<td>Antisepsis (Ninmi et al., 1990)</td>
</tr>
<tr>
<td>2</td>
<td>Arecaudaceae, Areca cainae</td>
<td>Durum cainae</td>
<td>Leaf and bark</td>
<td>Antisepsis, antipruritic</td>
</tr>
<tr>
<td>3</td>
<td>Arecaudaceae, Areca cainae</td>
<td>Manere</td>
<td>Stem</td>
<td>Antisepsis, wound healing</td>
</tr>
<tr>
<td>4</td>
<td>Aipharum, Aipharum cainae</td>
<td>Bala dama</td>
<td>Leaves and root</td>
<td>Antisepsis, wound healing, diarrhoea, appendicitis</td>
</tr>
<tr>
<td>5</td>
<td>Aipharum, Aipharum cainae</td>
<td>Madiarca</td>
<td>Leaf</td>
<td>Diuretic, anti-hypertension (Chetin, 1987)</td>
</tr>
<tr>
<td>6</td>
<td>Aipharum, Aipharum cainae</td>
<td>Pehe ou</td>
<td>Leaf, flower</td>
<td>Anti-pyretic, wound healing, stomach</td>
</tr>
<tr>
<td>7</td>
<td>Aipharum, Aipharum cainae</td>
<td>Capi ou</td>
<td>Whole plant</td>
<td>Stomach</td>
</tr>
<tr>
<td>8</td>
<td>Aipharum, Aipharum cainae</td>
<td>Parikk</td>
<td>Leaf, flower</td>
<td>Anti-inflammatory, stomach, diarrhoea</td>
</tr>
<tr>
<td>9</td>
<td>Aipharum, Aipharum cainae</td>
<td>Anil ou</td>
<td>Root</td>
<td>Urinary-dysfunction, Asthmatic (Nakagami and Okin, 1994)</td>
</tr>
<tr>
<td>10</td>
<td>Aipharum, Aipharum cainae</td>
<td>Hindiyis</td>
<td>Leaf</td>
<td>Stomach, diarrhoea</td>
</tr>
<tr>
<td>11</td>
<td>Saffron, Crocus chrisitina</td>
<td>Nadulbaj</td>
<td>Root</td>
<td>Diuretic</td>
</tr>
<tr>
<td>12</td>
<td>Saffron, Crocus chrisitina</td>
<td>Nadulbaj</td>
<td>Leaf</td>
<td>Diuretic</td>
</tr>
<tr>
<td>13</td>
<td>Bongora, Bongora cainae</td>
<td>Housousi ou</td>
<td>Root</td>
<td>Menstruation dysfunction</td>
</tr>
<tr>
<td>14</td>
<td>Bongora, Bongora cainae</td>
<td>Cohan cainae</td>
<td>Whole plant</td>
<td>Menstruation dysfunction</td>
</tr>
<tr>
<td>15</td>
<td>Cypnochlicke, Cypnochlicke cainae</td>
<td>Sabrun ou</td>
<td>Body, root</td>
<td>Rheumatism, respiratory regulation, diarrhoea</td>
</tr>
<tr>
<td>16</td>
<td>Cypnochlicke, Cypnochlicke cainae</td>
<td>Taro heinanj</td>
<td>Root</td>
<td>Stomach</td>
</tr>
<tr>
<td>17</td>
<td>Cypnochlicke, Cypnochlicke cainae</td>
<td>Boun koung</td>
<td>Leaf</td>
<td>Wound-healing</td>
</tr>
<tr>
<td>18</td>
<td>Cypnochlicke, Cypnochlicke cainae</td>
<td>Bis koung</td>
<td>Root</td>
<td>Diuretic, anti-malarial</td>
</tr>
<tr>
<td>19</td>
<td>Cypnochlicke, Cypnochlicke cainae</td>
<td>Dang koung</td>
<td>Root</td>
<td>Body, stomach</td>
</tr>
<tr>
<td>20</td>
<td>Cypnochlicke, Cypnochlicke cainae</td>
<td>Coo nding</td>
<td>Body</td>
<td>Stomach</td>
</tr>
<tr>
<td>21</td>
<td>Cypnochlicke, Cypnochlicke cainae</td>
<td>Chou koung</td>
<td>Fruit</td>
<td>Antcrypt, anti-malarial</td>
</tr>
<tr>
<td>22</td>
<td>Bongora, Bongora cainae</td>
<td>Gile</td>
<td>Body</td>
<td>Stomach, diarrhoea, urinary dysfunction, wound healing, (and Turel, 1995)</td>
</tr>
<tr>
<td>23</td>
<td>Eucalyptus, Eucalyptus cainae</td>
<td>Ak houngj</td>
<td>Body</td>
<td>Stomach, diarrhoea, urinary dysfunction, wound healing, (and Turel, 1995)</td>
</tr>
<tr>
<td>24</td>
<td>Eucalyptus, Eucalyptus cainae</td>
<td>Mee</td>
<td>Root</td>
<td>Respiratory regulation,</td>
</tr>
<tr>
<td>25</td>
<td>Eucalyptus, Eucalyptus cainae</td>
<td>Kayashen</td>
<td>Whole plant</td>
<td>Anaesthetic, stomach, urinary dysfunction</td>
</tr>
<tr>
<td>26</td>
<td>Eucalyptus, Eucalyptus cainae</td>
<td>Mee</td>
<td>Root</td>
<td>Stomach</td>
</tr>
<tr>
<td>27</td>
<td>Eucalyptus, Eucalyptus cainae</td>
<td>Boun koung</td>
<td>Root, leaf</td>
<td>Stomach</td>
</tr>
<tr>
<td>28</td>
<td>Eucalyptus, Eucalyptus cainae</td>
<td>Boun koung</td>
<td>Root, leaf</td>
<td>Antimicrobial</td>
</tr>
<tr>
<td>29</td>
<td>Eucalyptus, Eucalyptus cainae</td>
<td>Boun koung</td>
<td>Root</td>
<td>Relative, appetite, cold, Wound healing, diarrhoea</td>
</tr>
</tbody>
</table>

The research area in K. Maras, in South East Mediterranean Region, latitude 37° 36’ E and longitude 37° 56’ E and 568m above sea level covered 23 forests and mountain villages. Our ethnomedical survey included Saksukoi (1800m), Cimen (2300m) and Ahirdagi (2100m) mountains which are the highest points in the area. The public survey was conducted in vegetation period of March-October. Three main vegetation types can be distinguished in the study area: Macchie (from 500 to 850m). Forest (from 600 to 1800m) and Steppe vegetation (mostly found just above the timberline at 1800m and at 1600m in the clearing forest) (Turkmen and Dekenli, 1998). The main characteristic of this area are dry summer, warm and rainy winters. The seasonal precipitation regimes during the year is as follows: winter, spring, autumn and summer. It is a typical Mediterranean climate.

Some of the medicinal plants used in this area, have not been studied for their detailed antimicrobial and medicinal effects. This survey may assist the evaluation of medicinal plants before the implementation of any critical tests.

Results and Discussion
This survey includes 88 plants representing 47 families. It was found that usually local plants were used for the treatment. Methods of preparation and uses were similar for many plants: tea, powder, or decoction (after boiling) from some parts of plants like root, fruit, seed and leaf. These plants were frequency used as a single and sometimes in mixture form.

Table 1 summarizes the data regarding 88 species claimed to have medicinal properties. The methods of preparation and use of the plant part employed are mentioned by Lipp (1989). References concerning similar uses and pharmacological evidence are listed for some species. The plants with a wider geographical distribution were used by most native people in different areas. Most of the plants used were antiseptic (14 species), diuretic (27 species), stomach ache (27 species) and wound (14 species).

126
Karaman and Kocabas: Traditional Medicinal Plants of K. Maras (Turkey)

30. Capparidaceae, Capparis spinosa
31. Juglandaceae, Juglans regia
32. Labiatae, Eupatorium angustifolium
33. Labiatae, Melissa officinalis
34. Labiatae, Mentha longifolia
35. Labiatae, Monarda didyma
36. Labiatae, Monotropa uniflora
37. Labiatae, Origanum vulgare
38. Labiatae, Salvia officinalis
39. Labiatae, Salvia viridis
40. Labiatae, Sideritis linaria
41. Labiatae, Tournefortia ochroleuca
42. Labiatae, Thymus latifolius
43. Labiatae, Thymus pulegioides
44. Labiatae, Thymus serpyllum
45. Labiatae, Zephrira chamaecyparissus
46. Lilaceae, Nymphaea alba
47. Lilaceae, Nymphaea capensis
48. Lilaceae, Nymphaea odorata
49. Lilaceae, Nymphaea speciosa
50. Lilaceae, Hymenocallis alba
51. Liliaceae, gladiolus
52. Liliaceae, Allium cepa
53. Liliaceae, Lilium bulbiferum
54. Liliaceae, Lilium bulbiferum
55. Liliaceae, Lilium candidum
56. Liliaceae, Lilium longiflorum
57. Liliaceae, Lilium martagon
58. Liliaceae, Lilium regale
59. Liliaceae, Lilium tigrinum
60. Liliaceae, Lilium tigrinum
61. Liliaceae, Lilium tigrinum
62. Liliaceae, Lilium tigrinum
63. Liliaceae, Lilium tigrinum
64. Liliaceae, Lilium tigrinum
65. Liliaceae, Lilium tigrinum
66. Liliaceae, Lilium tigrinum
67. Liliaceae, Lilium tigrinum
68. Liliaceae, Lilium tigrinum
69. Liliaceae, Lilium tigrinum
70. Liliaceae, Lilium tigrinum
71. Liliaceae, Lilium tigrinum
72. Liliaceae, Lilium tigrinum
73. Liliaceae, Lilium tigrinum
74. Liliaceae, Lilium tigrinum
75. Liliaceae, Lilium tigrinum
76. Liliaceae, Lilium tigrinum
77. Liliaceae, Lilium tigrinum
78. Liliaceae, Lilium tigrinum
79. Liliaceae, Lilium tigrinum
80. Liliaceae, Lilium tigrinum
81. Liliaceae, Lilium tigrinum
82. Liliaceae, Lilium tigrinum
83. Liliaceae, Lilium tigrinum
84. Liliaceae, Lilium tigrinum
85. Liliaceae, Lilium tigrinum
86. Liliaceae, Lilium tigrinum
87. Zygophyllaceae, Peganum harmala
88. Zygophyllaceae, Tribulus terrestris

References
Baytop, T., 1984. Türkiye bitkileri: İle Tedavi, Istanbul University Yayınevi, Yayıncılık No: 3255, İstanbul
Davis, P.H., 1982. Flora of Turkey and East Aegean Islands Edinburg Univ. Press., Vol. 1-10
Karaman and Kocabas: Traditional Medicinal Plants of K. Maras (Turkey)


