ABSTRACT:
Today is the era of standardization, manufacturing of drug is very important. It is very responsible job. To prepare the drug of standard quality, one has to take efforts from the collection of raw material to storage and distribution of prepared drugs. The collection of crude drug is very much important while preparing medicine and is used in treatment of various diseases. The raw material which is used to prepare the medicine should be of good quality and effective and should be of standard parameters. In modern science as per WHO, norms of good collection and storage practices are described. Ayurveda also explained the various parameters for good collection and storage practices. According to Ayurveda collection of raw material is not only the manual job or simple collection of medicine, But it is related to the efficacy or the medicinal value of the raw material. In Ayurvedic texts like Charaka Samhita, Sushrut Samhita, Ashtang hridaya, Sharangdhar Samhita etc. Collection and Storage of crude drugs is described. The various parameters are to be considered while collecting the drugs. Along with the desha, Bhumi- type of land or type of soil where the plants are grown, season, parts of plant, condition of plant, and precautions followed by physicians while collecting the drug, all these points are considered in collection of the crude drugs. Nowadays it is very difficult to followed all the criterias as given in our texts. But some of the criterias can be apply for collection and storage of drugs. This article is reviewed to focus this aspect described in Ayurveda.

Key words: Collection, storage, season.

Introduction: The collection and storage of crude drug is described in Ayurvedic texts like Charaka Samhita, Sushrut Samhita, Ashtang hridaya, Sharangdhar Samhita etc. In the manufacturing of medicine it is important that the raw material which is used should be of good quality and effective.

In Charak Samhita it is clearly mentioned that, Every drug will be more effective when it is collected from proper desh i.e. sthana, in proper season when it is completely grownup and properly stored. There are various parameters which are considered while collection of drugs in our samhitas those are:

1. Desha
2. Bhumi i.e. Land
3. Dish i.e. Direction
4. Nakshatra
5. Rutu i.e. Season
6. Condition of the plant
7. Quality of the plant
8. Parts of the plant
9. Precautions followed by Bhishak

1. Desha: There are three types of desha described in our texts i.e. Jangala Anup and Sadharana. Jangala desh is having dry land, Anup is having moist land and Sadharana desha is of mixed properties containing both dry and moist type of land. Some plants are grown in anup desha and some are grown in jangal desha.
Quality of plant can be changed accordingly.  

2. Bhumi i.e. Land: The land is made up of soil. Soil is made up of five elements and therefore six rasas are developed in the plant. All plant, animal and minerals are related to soil. The plant should be grown in good fertile soil, should not be infected by worms. The land where the plants are developed should be plain, which soil is soft, any type of grass can be grow i.e. fertile. The land which do not contain big holes, soil should not contain stones, silica etc. Salty soil, infected with worms, affected by fire and snow will not yield the desired effect. Marshy land, burial ground and Roads are avoided. Due to disturbance of people the plant life can be affected. For the proper and complete growth of plant soil is very important. Therefore quality of soil is considered while collection of drugs. 

The plant grown from good soil which is not infected by worms, poison, weapons, heat, wind and water. Roots of plant should be buried dipped in to the earth, that means plant is completely developed. That should be collected.  

3. Disha or Directions: Plants grown in north and east directions are to be collected, because north direction is of moon and east direction is of sun, therefore power of both gods are came into the plant.  

4. Nakshatras: As directions, specific nakshatras are also considered while collecting the plant. Mainly Pushya, Hasta, Mruga, Ashwini nakshatras are mentioned. Due to the blessings of moon, sun and Ashwinikumar the potency of the plant collected at the time of specific nakshatra is increased. Therefore they become more effective.  

5. Rutu or Seasons: There are specific seasons (Rutus) are mentioned for collection of plants. At that time the specific part of that plant is fully developed therefore possess more active principle. It becomes highly potent. So plant should be collected at that specific time. According to Charaka Samhita:  

<table>
<thead>
<tr>
<th>Part of the plant</th>
<th>Rutu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shakha</td>
<td>Varsha, Vasant</td>
</tr>
<tr>
<td>Patra</td>
<td>Varsha, Vasant</td>
</tr>
<tr>
<td>Moola</td>
<td>Greeshma, Shishira</td>
</tr>
<tr>
<td>Twaka</td>
<td>Sharada</td>
</tr>
<tr>
<td>Kanda</td>
<td>Sharada</td>
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<tr>
<td>Ksheera</td>
<td>Sharada</td>
</tr>
<tr>
<td>Saara</td>
<td>Hemanta</td>
</tr>
<tr>
<td>Pushpa (flowers) and Fala (fruits)</td>
<td>Yatha rutu</td>
</tr>
</tbody>
</table>

According to Rajnishantu:  

<table>
<thead>
<tr>
<th>Part of the plant</th>
<th>Rutu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kanda</td>
<td>Hemant</td>
</tr>
<tr>
<td>Moola</td>
<td>Shishira</td>
</tr>
<tr>
<td>Pushpa</td>
<td>Vasant</td>
</tr>
<tr>
<td>Patra</td>
<td>Greeshma</td>
</tr>
<tr>
<td>Panchaanga</td>
<td>Sharada</td>
</tr>
</tbody>
</table>

According to Sushrut Samhita:
Part of the plant | Rutu
---|---
Patra | Varsha
Moola | Pravrut
Kanda | Sharada
Ksheera | Hemanta
Saara | Vasant
Fal(fruits) | Greeshma

5(a) Season according to Veerya i.e. Potency: As per Sushrut Samhita due to the effect of Sun and Moon in nature, plants possess two types of potencies or Veerya i.e. Sheet (Cool) and Ushna (Heat). Therefore, plants having sheeta potencies should be collected in sheet rutu i.e. Visarga kala or cold season. And plants having ushna potencies should be collected in Ushna rutu i.e. Aadana kala or hot season. Therefore, that properties of plants increases predominantly.

5(b) Season according to Karma: Sharangdhar quotes more practical approach that all types of plants should be collected in Sharada rutu except the plants which are used for Vaman and Virechana. These plants should be collected in Vasant Rutu.

6. Condition of plant: While collecting drugs for different formulations the condition of raw drug is also very important. Chakradatta described the condition of plant, i.e. fresh or dried, newly collected or old, their ability to combine with other drugs, useful for different processing such as swarasa etc. and able to produce specific action.

Sushruta says that all plants which are used in medicines should be new i.e. before one year it should be used. Except Vidanga, Pippali, Honey, Ghruta, these should be old i.e. after one year it should be used.

Sharangdhar has added to this that Vidanga, Pippali, Guda, Dhanyaka, Ghruta, Honey, these dravya should be old. But other plants should be new. Some drugs are more potent when they are fresh or new. While some drugs become more potent when they become dry or old.

7. Quality of Plant: Plants or medicines which is not of foul smell or test is not vitiated or improper, weather it is old or new should be used or collected.

8. Parts of the plant: The plants which are used in medicines should be completely and well developed, not infected by worms. Parts of the plant should be collected as per specific season. This is also related to their complete growth. So the expected qualities should be in the plant for a better result in the treatment. After complete growth of the plant, roots should be collected. Leaves, Fruits, Flowers are collected when they are completely grown. After complete ripening of fruit seeds should be collected. Bark of the plant should be collected when it can removed easily.

The root bark is to be collected in case of big roots whereas in case of tender ones the entire root system is collected. In case of big trees like Nyagrodha etc. their outer bark is to be collected. In case of trees like Bijaka etc. their pith, in case of Talisa, their leaves, in case of Triphala, their fruits, in case of Dhatala, their flowers and in case of Snuhi there sap is to be collected.

9. Precautions followed by Bhishak i.e. Physician: The most important aspect described in our text is that the collection of...
drug should be done by a person who is an expert, who had the knowledge of plants and have faith and confidence in efficacy of the plant. These rights are given to the Bhishak or physician only. While collecting the plant the physician who is pure in mind and clean in body, wearing white clothes should collect the herbs during sunshine praying to lord Dhanwantari in silence.\textsuperscript{13,14,15}

Bhishak or Physician should have knowledge and faith in the quality and efficacy of the medicine. He should be purely involved in the collection and preparation of medicine. He should be strict about the quality of the drug. He have to used the medicine with faith and confidence. Now a days it is not possible to Physician to collect the drugs but the expert person should be there to collect the plants.

**Storage of drugs:** After collection of plants, storage is most important. If they are not store properly medicinal qualities of plant will be affected. It will be infected by worms and can be harmful to the body. Therefore storage of plant is described in our text.\textsuperscript{16,17,18}

After collection of the plants, they are properly dried and then stored. The rooms where the plants are stored should be big, spacious, with high ceiling, airy, well ventilated and lighted. The entrance of the rooms should be towards east or north. *Dhoopan, Gandha* and *Balikarmas* should be done frequently in the room. There should be no disturbance of animals, rodents or caterpillars. The rooms should be kept clean. The plants after proper drying should be kept in a big container. It should be preserved properly, without being spoiled by smoke, rain, air and moisture through all the season.

The container should be clean, fumigated. These should be closed properly and labelled. Poisonous drugs should be kept separately and labelled properly. All the measures of cleanliness and aseptic precautions should be taken.

**DISCUSSION:** In this way our Acharyas had explained the collection and storage of drug very minutely. From *Desha*, land i.e. growth of plant, its condition fresh or dry, new or old. All these points are explained very clearly. During the preparation of medicine, to make a medicine more effective and potent, these criteria should be considered.

In today’s era some criteria like specific season, directions and nakshatras etc. could not be possible to be followed. But proper growth of plant, specific parts or condition of plant, aseptic precautions, cleanliness and collection of plant by expert person who have the knowledge of the plant etc. should be practised. As well as storage of drugs can be followed according to Ayurveda.

**CONCLUSION:** According to Ayurveda collection and storage of raw material can be done, so that it will be more effective to be used in medicine.

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