INTRODUCTION
The plants have served as source of vitamins, protein, fat and carbohydrates. They become important when their functions are considered in human body (Adegoke et al., 2006). The absence of some vitamins in the body can lead to primary and secondary deficiency disease (Lawal et al., 2010). Guduchi is widely used in veterinary folk medicine/ayurvedic system of medicine for its general tonic, anti-periodic, anti-spasmodic, anti-inflammatory, anti-diabetic properties (Nadkarni and Nadkarni, 1976; Chopra et al., 1982; Zhao et al., 1991). In this study the nutritional evaluation of different extracts from fruits of T. cordifolia and P. americana was determined through standard methods.

Materials and Methods / Collection of Fruit samples
Fresh fruit samples of Tinospora cordifolia and Persea americana fruits were collected from different agro-climatic regions of Coimbatore and The Nilgiris District, Tamil Nadu from the natural strands. Fresh plant materials were washed under running tap water, air-dried and then homogenized to fine powder and stored in airtight bottles.

Crude dried powder extraction
Air-dried powder (50 g) was taken in 200 ml of petroleum ether/Ethyl acetate/Ethanol/water in a conical flask, plugged with cotton wool and they were shaken at room temperature for 2 days. After 2 days of incubation, the supernatant was collected and the solvent was evaporated to make the final volume one fourth of the original volume and stored at 4°C in airtight bottles.

Proximate Analysis
The moisture content of the fruit samples was determined by following the method of AOAC (1970).

The protein content of the sample was determined by micro-kjeldahl method (Humphries, 1956).

Determination of ether extract (or) total crude fat, crude fiber, and Ash content (AOAC, 1970). Two g of air dried fruit powder was extracted with ether in a Soxhlet apparatus for 16 h. according to the Association of Official Agricultural Chemists (1970).

Determination of Nitrogen Free Extractives
Percentage of NFE was calculated according to the method of Muller and Tobin, (1980)

The calorific values of the fruits were determined according to the method of Sidhuraju et al., (1992) by multiplying the percentage of crude protein, crude lipid and nitrogen free extractives by the factors 16.7, 37.7 and 16.7, respectively.

Analyses of Macronutrients
Extraction and Estimation of total Carbohydrates
The total carbohydrates content of ripen fruit flour was extracted and estimated by following the method of Hedge and Hofreiter (1962).

Extraction and Estimation of Proteins (True Proteins)
The protein content was measured by the method of Lowry et al., (1951).

Mineral composition
Estimation of Sodium and Potassium
Sodium and Potassium were estimated by using Flame Photometer Model-EEL. The sodium Potassium contents were calculated by referring to the calibration curves, of sodium and Potassium, respectively and expressed as mg 100g-1 of fruit sample.

Calcium and Magnesium
Triple acid digested extract (5 ml) was taken in a China dish, to this 10 ml of ammonium chloride- Ammonium hydroxide buffer (pH 10) and few drops Erichrome black T indicator (0.1g of Erichrome black T dissolved in 25 ml of methanol containing 1g of hydroxyamine hydrochloride) were added and titrated against 0.02N versenate solution until the colour changes to blue.

Estimation of phosphorus
The phosphorous content of the fruit sample was estimated by following method of Dickman and Bray (1940).

Quantification of vitamin-C
The vitamins of ascorbic acid (Vitamin- C) concentration in fruits were determined through standard methods.
the fruit sample was extracted and estimated by following the method of Hawks (1954).

RESULTS
The research findings pertaining to the following parameters are presented in table 1,2,3 and 4.

Proximate composition
The data on the proximate composition of the fruit powder samples investigated are shown in table 1

Total carbohydrates
The total carbohydrate content of the presently investigated two different fruit sample were found to be 1.02 and 6.92 g/100g of fruit powder. Table-2

Total (true) protein
The data on total true protein of dried fruit powder materials of T.cordifolia and P.americana contained substantial levels of total protein 7.13and 1.2 g/100g of protein. T. cordifolia fruit has registered the highest level of total protein. Table-2

Mineral composition
The data on mineral composition of two different fruit samples are presented in Table 3,

Vitamins
Ascorbic acid (vitamin-C) content of the two different fruit samples were found to be 24 to 40mg/100g fruit powder, respectively. Among the two different fruit samples the P.americana has registered the highest level of Vitamin-C content (Table -4).

Table 1. Proximate Composition of T.cordifolia and P.americana fruits*%

<table>
<thead>
<tr>
<th>Component</th>
<th>Moisture (%)</th>
<th>Crude protein (%)</th>
<th>Crude fat (%)</th>
<th>Crude fiber %</th>
<th>Ash content (%)</th>
<th>NFE</th>
<th>Calorific Value %</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. cordifolia</td>
<td>1.0</td>
<td>10.075</td>
<td>2.01</td>
<td>5.45</td>
<td>9.5</td>
<td>72.96</td>
<td>1477.59</td>
</tr>
<tr>
<td>P. americana</td>
<td>2.2</td>
<td>9.80</td>
<td>1.22</td>
<td>5.32</td>
<td>7.0</td>
<td>76.66</td>
<td>189.80</td>
</tr>
</tbody>
</table>

* All Values are mean of triplicate determinations expressed on dry weight basis (g/100 g fruit powder)

Table 2 Data on total protein and total carbohydrate content of two different fruit samples of T. cordifolia and P. americana (g/100 g DM)

<table>
<thead>
<tr>
<th>Samples</th>
<th>Total carbohydrates</th>
<th>Total protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. cordifolia</td>
<td>6.92</td>
<td>7.13</td>
</tr>
<tr>
<td>P.americana</td>
<td>1.02</td>
<td>1.2</td>
</tr>
</tbody>
</table>

* All Values are mean of triplicate determinations expressed on dry weight basis

Table 3 Mineral composition of two different fruit Samples of T.cordifolia and P.americana(%)*

| Samples      | Sodium | Potassium | Calcium | Magnesium | Phosphorus | Iron |  |
|--------------|--------|-----------|---------|-----------|------------|------| |
| T.cordifolia | 0.28   | 0.48      | 0.13    | 0.31      | 0.058      | 0.025 |
| P.americana  | 0.16   | 0.001     | 0.008   | 0.009     | 0.095      | 0.04  |

* All Values are mean of triplicate determinations expressed on dry weight basis

Table 4 Vitamin- C content of two different fruit Samples of T.cordifolia and P.americana

<table>
<thead>
<tr>
<th>Name of the vitamin</th>
<th>Fruit powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>T.cordifolia</td>
<td>24</td>
</tr>
<tr>
<td>P.americana</td>
<td>40</td>
</tr>
</tbody>
</table>

DISCUSSION
Proximate composition
Two different dried fruit samples materials of T. cordifolia and P. americana fruits contain the protein level is comparable to earlier on T. cordifolia stem has (Bhawya, Anil kumar, 2010) and P. americana (Olayiwola olajumoke Abidemi, 2013). In this present study the crude fat content of two different fruit samples are (1.22 to 2.01% compared to earlier report on P. americana (Nwaogu et. al., 2008). T. cordifolia contain the highest level of ash (9.5g/100g) it is compared to previous report on same (Bhawya and Anil kumar, 2010; Nasreen et al., 2010). The fiber content of two plant fruit samples is 5.45 and 5.32% Which are comparable to earlier report on P. americana sample showed the lower level of crude fiber (Olayiwola Olajumoke Abidemi, 2013). The moisture content of two different fruit sample is comparable to earlier report is higher than that of present study in the same species (Nwaogu et. al., 2008;Olayiwola Olajumoke Abidemi, 2013) T. cordifolia stem sample has low levels of moisture content (Bhawya and Anil Kumar, 2010; Nazarudeen et al., 2010; Olayiwola Olajumoke Abidemi, 2013).

Total protein and Total carbohydrates
In present study the two different fruit samples exhibits the total protein content 1.2 - 1.2 - 7.13 and 1.02-6.92 g/100 g These values are compared to Carissa opaca (Chandra Subhash et al., 2011) Berberis lyceum (Zain and Ullah et al., 2013).

Mineral composition
The micronutrients in presently studied wild fruits were appreciably high. The highest iron content was recorded in P. americana (40mg/100g) and the phosphorus content (95mg/100g) are maximum in the same species. These values are compared to earlier reports on Banana, Carissa spinarum, Guava, Pomegranate, Eugenia rothii, Mimusops elengi, Mulas domestica, Papaya, Grapes (Ajai kumar et al., 2012).

5.6. Vitamins
Vitamin deficiencies may result in disease conditions. In the present study, among two different fruit samples the P. americana fruit showed the highest value of vitamin-C (40mg/100g). These values are compared to earlier report on Carissa opaca (Chandra Subhash et. al., 2011) Bridelia tomentosa, Carissa spinarum, Eugenia rothii Malus domestica, Ziziphus rugosa (Ajai kumar t al.,2012).

Conclusion
The both fruit samples have potential for human feeding, judging from their proximate composition, total carbohydrate, protein and minerals were compared favorably with the conventional edible fruits. The P. americana fruits contain high levels of iron and ascorbic acid that protect human beings from scurvy and related ailments.
REFERENCE