

## **INTER - AND MULTIPLE CROPPING WITH COCONUTS - A BIBLIOGRAPHY**

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Coconut (*Cocos nucifera* Linn.) belongs to the monocotyledonous family Palmae. It occupies a conspicuous position in the vegetable kingdom due to certain features characteristic of the palms. The pattern of development and arrangement of leaves of the coconut crown is very important from the point of view of intercropping. The transmission of light through the coconut canopy is one of the most important factors affecting the success of intercropping programmes.

In the case of perennials such as tree crops, the strategy for intensive multiple cropping is to have parallel combinations of crops in such a way that other crops of less duration are planted in the interspaces without changing the planting pattern of the main crop. Depending upon the duration of the additional crops so grown, the cropping system shall be con-



sidered as inter-mixed-, or multistoreyed cropping.

When annuals or seasonal crops are grown under coconuts, it

is known as intercropping and when perennials are grown, it is called mixed cropping. When a combination of intercrops and

mixed crops are raised together, it is termed as multistoreyed cropping (Thampan, 1981). When animal husbandry is incorporated with mixed cropping, it is referred to as mixed farming. Multistoreyed cropping is also referred to as High Density Multi-Species Cropping System (CHMSCS).

Inter-or mixed cropping in coconut gardens is very popular in the important coconut growing states in India. Intercropping is a source of subsidiary or addi-

tional income from the coconut plantation.

The annual crops commonly cultivated in coconut plantations are : [1] Cereals – such as maize, millets, paddy, ragi and sorghum; [2] Grain legumes [pulses] – such as cowgram, green gram, horse gram, cowpea and groundnuts; [3] Root crops – such as cassava [tapioca], sweet potato and yams; [4] Vegetable crops; [5] Spices-such as chillies, turmeric, ginger, coriander and black pepper.

Pineapple and sugarcane are also reported to be grown. The practice of growing trees or shrubs of perennial nature such as coffee, cacao, papaya, plantain, clove, cinnamon, arecanut, mango and jack along with coconut is also in vogue among coconut growers.

This bibliography has 143 entries contributed by 136 authors. Entries are arranged in alphabetical order in the name of the author[s] and serially numbered. An author index is also appended.

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| Manthirratna MAP         | — 44                                    | Sethumadhava Menon K  | — 113,114,127<br>128     |
| Markose VT               | — 53,62,134                             | Sharif Bin Ahamad MD  | — 26                     |
| Marquez LM               | — 61                                    | Shepherd R            | — 56,57,129              |
| Mathew George            | — 99                                    | Sivaraman K           | — 89                     |
| Menon AK                 | — 63                                    | Smith RW              | — 130,131                |
| Menon KPV                | — 64                                    | Srinivasa Rao T       | — 132                    |
| Michael AM               | — 65                                    | Sudhakaran K          | — 43                     |
| Mohamed PPS              | — 66                                    | Sunny AF              | — 53                     |
| Mohamed Snafee           | — 39                                    | Tam Tai Kin           | — 133                    |
| Muhammad Edachal         | — 67                                    | Tech KC               | — 100                    |
| Muraleedharan Nayar CP   | — 68                                    | Thampan PK            | — 134                    |
| Nair PKR                 | — 10,46,49,<br>69-77,78                 | Thomas KG             | — 135                    |
| Nair SK                  | — 73-79                                 | Thomas Varghese P     | — 49,77,89,<br>136-139   |
| Nambiar KPP              | — 42                                    | Tobias KI             | — 140                    |
| Nandakumar TB            | — 62,80                                 | Todd JR               | — 22                     |
| Narayanan KM             | — 81                                    | Tolentino LT          | — 12                     |
| Nasrun Bin Baginda Hamid | — 65                                    | Turner PD             | — 56,57                  |
| Nayar NM                 | — 82                                    | Vanialingam T         | — 100                    |
| Nelliat EV               | — 10,34,49,53<br>74-76,83-90<br>108,139 | Varkey T              | — 112                    |
| Ng SK                    | — 51                                    | Vernon AJ             | — 141                    |
| O'Douohue J              | — 32                                    | Vikraman Nair R       | — 142,143                |
| Owens Jones JB           | — 92                                    |                       |                          |
| Padmanabhan V            | — 51                                    |                       |                          |
| Pandalai KM              | — 51,64                                 |                       |                          |

\*\* (Reference is given to the serial number of the entry)