



Uses of *Murraya koenigii* and *Coriandrum sativum* - A Review

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Introduction

Humans have relied mostly on plants for nutritional and medicinal needs. The medicinal use of plant is as a result of phyto-constituents present in them. Curry leaves (*Murraya koenigii*) and Coriander leaves (*Coriandrum sativum*) are widely consumed leaves in various diets of India . Both leaves are rich in many bioactive compounds like polyphenols, flavonoids and alkaloids which showed bioactive functions like anti-oxidant ,anti-microbial, anti-diabetic, anti-cancer and hepato-protective. They are also rich in essential oil compound namely coumarine, bicyclomahanimbicine in curry leaves and monoterpenoid – linalool found in coriander

leaves. Based on the richness of bioactive nutrients both leaves acts as a good store house for the functional compounds. In addition to bioactive functions, they are used in the household medicines.

Murraya koenigii (Curry Leaves)

Botanical Name : *Murraya koenigii* or *Berberia koenigii*
Tamil Name : Karvepillai
Sanskrit : Krishnannimba or kata saka or Gandheta
Hindi : Katnim
Telugu : Karivepaku
Family : Rutaceae

Murraya koenigii has been used for flavouring and spicing of food since ancient time. The phytochemicals present in *Murraya koenigii* are flavonoids, phenols, saponins, alkaloids, tannins, glycosides. Carbohydrates, moisture content, Fats, Protein, vitamins and minerals.

Food value per 100g, approximately

| | |
|------------------------|-------------|
| Carbohydrate | 15 g |
| Protein | 6 g |
| Fat | 1 g |
| Calcium | 705 mg |
| Phosphorus | 60 mg |
| Iron | 4 mg |
| Vitamin A | 13,580 I.U. |
| Vitamin B ₁ | 59 mcg |
| Vitamin B ₂ | 198 mg |
| Niacin | 3 mg |
| Vitamin C | 4 mg |
| Calories | 99 |

Suvai (Taste): Siru kaarppu (Mild Pungent)

Thanmai (Character): Veppam (Hot)

Pirivu (Division): Kaarppu (Pungent)

Actions:

- Tonic
- Stomachic

Character

It cures anorexia, abdominal pain, dysentery, chronic fever and insanity.

The flavonoids present in the *Murraya koenigii* possess anti-fungal, anti-bacterial activity, anti-oxidant and anti-inflammatory activities. They have the ability to scavenge the free radicals which implicated in causing age related disease like diabetes, cardiovascular and etc. Saponins present in the *Murraya koenigii* acts as immune booster. Plants rich in saponins having anti-inflammatory, cholesterol lowering and anti-cancer activities. Alkaloids have anti-microbial properties. Phenolic compounds have anti-tumour and anti-oxidant effects. The low amount of fat indicates that it controls the accumulation of fat which cause atherosclerosis and aging. The proteins in the leaves are involved in the

formation of hormones, enzymes and structural membranes. *Murraya koenigii* contains good amount of dietary fibre. Fibre lowers cholesterol level, risk of coronary heart disease, diabetes and cancer. Niacin helps to lower and regulate cholesterol level and helps in maintaining good blood circulation. Vit-A helps to provide good vision and healthy immune system. Vit – C & E are strong anti-oxidants. Riboflavin helps in production of red blood cells and important in growth of healthy body. Mineral and trace elements play important role in immune function and health.

***Coriandrum sativum* (Coriander, Kothumalli)**

| | |
|-----------------------|-----------------------------|
| Botanical Name | : <i>Coriandrum sativum</i> |
| Tamil Name | : Kothumalli |
| Sanskrit | : Kustumbari |
| Hindi | : Kothimir |
| Telugu | : Kothimiri |
| Family | : Umbelliferae |

Coriander is valued for its culinary and medicinal uses. All parts of this herb are in use as flavoring agent and as traditional remedies for the treatment of different disorders. Chemical composition of Coriander are Essential oil, fatty acids, flavonoids, carotenoids as well as coumarin compounds. It also revealed that the linalool, alpha – pinene, gamma-terpinene, camphor and limonene.

Food value per 100 g approximately

| | |
|------------------------|--------------------|
| Carbohydrates | 5g |
| Protein | 3g |
| Fat | 0.7 g |
| Calcium | 140mg |
| Phosphorus | 60 mg |
| Iron | 8 mg |
| Vitamin A | 8,645 -13,580 I.U. |
| Vitamin B ₁ | 49 mcg |
| Vitamin B ₂ | 60 mcg |
| Niacin | 0.7 mg |
| Vitamin C | 131 mg |
| Sodium | 4 mg |
| Pottasium | 453 mg |
| Oxalic acid | 5 mg |
| Calories | 55 |

Suvai (Taste) : Kaarppu (Pungent)

Thanmai (Character): Seedha veppam

Pirivu (Division) : Kaarppu (Pungent)

Action

Stomachic
Carminative
Stimulant
Diuretic

Character

It cures indigestion, ageusia, diseases of pitha humour and fever due to pitham, besides increasing the strength and spermatogenesis. The pharmacological activities include anti-microbial, anti-oxidant, anti-diabetic, anxiolytic, anti-epileptic, anti-depressant, anti-mutagenic, anti-inflammatory, anti-dyslipidemic, anti-hypertensive, neuroprotective and diuretic. Coriander has been of wide medicinal use in different gut disorders, such as dyspepsia, indigestion, diarrhea, flatulence, dysentery, appetizer and carminative.

Conclusion

This review shows that *Murraya koenigii* (curry) leaves used as spice and flavouring agent in food contains substantial amount of phytochemicals and phytonutrients. And Coriander has been traditionally used across various civilizations both as culinary ingredient and for a wide range of medicinal uses.

References

1. Noi-Illa Neri
2. Gunapaadam – Mooligai
3. Padhartha Guna Chinthamani Moolamum Uraiyum
4. [https://www.researchgate.net/publication, Coriander](https://www.researchgate.net/publication/Coriander) (Coriander sativum L.):A Potential Source of High – Value Components for Functional Foods and Nutraceuticals – A Review.
5. Phytochemical and nutritional profile of *Murraya koenigii* (Linn) Spreng leaf.
6. Herbal Foods and its medicinal values, Published by National Institute of Industrial Research.

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