



Research Article

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**EVALUATION OF NUTRITIONAL PROFILE, MEDICINAL VALUE AND
QUALITATIVE ESTIMATION IN DIFFERENT PARTS OF *PYRUS PASHIA FICUS*
PALMATA AND *PYRACANTHA CRENULATA***

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ABSTRACT

The various extracts of bark fruit and root of *Pyrus pashia*, *Ficus palmate*, *Pyracantha crenulata*, were investigated for its physicochemical and phytochemical screening¹. Ash value (total ash) moisture crude fat and crude fiber Extractive values were studied dry weight². Ash content analysis was showed total crude fiber content Preliminary phytochemical analysis test showed the presence of carbohydrates and glycosides, alkaloid, flavonoid, saponins, tannins, unsaturatedtriterpenoids and sterol, resin.

Key Words: - Nutritional value, Ash value, and phytochemical screening,

INTRODUCTION:

The Garhwal region of Uttarakhand is highly enriched with edible wild fruit. Such Fruits are highly potential with medicinal value and Nutritional value due to the presence of bio-actives.³ these fruits are consumed by local inhabitants to play a significant role as supplementary

food. They are especially beneficial to such areas where there is a limited availability and variety of marketed fruits. A whole range of plant derived dietary supplements, Photochemical and pro- vitamins that assist in maintaining good health and combating diseases are now being treated as functional

foods⁴. Nutraceuticals, A food based approach instead of a drug based approach to conquer malnutrition is the crux of such approach. This new category of health products, which lies between foods and drugs named as Nutraceuticals. Such Nutraceuticals include the species. *Berberis*, *Cratagus*, *Prunus*, *Rubus*, *Fragaria*, *Cornus*, *Annona*, *Amplocissus* etc. There is a pressing need for investigating these resources and documenting their nutritional and medicinal properties, palatability, overall acceptability, availability, methods of harvesting and preparation used by native people along with their collection, screening, identification, vernacular names, distribution and preservation⁵. Fruits are very useful for the preparation of Nutraceuticals because fruits and crops are harvested from the forest as plants are safe and ready to produced fruits for next year and we get highly nutritive fruits without any environmental loss. Stephen de Felice, M.D. director of New York's Foundation for Innovation in Medicine is credited with first use of the term Nutraceutical in 1989⁶. It describes specific chemical compounds found in foods that may prevent disease.

Nutraceuticals as “Natural, bioactive” chemical compounds that have health promoting, disease preventing or medicinal

properties⁷. Nutraceutical are those chemical compounds which can be considered a food or its part which, in addition to its normal nutritional value, provides health benefits including prevention of diseases or promotion of health⁸. The major diseases for the prevention and treatment of which, nutraceuticals have been associated are heart diseases, cancer, hypertension, and diabetes, The food substances used as Nutraceuticals contain antioxidants, minerals, vitamins, perbiotics, probiotics, polyunsaturated fatty acids certain phytochemicals and dietary fibers. Instead of focusing on different plants, we have decided to attend the medicinal properties, nutritional value and antimicrobial activity of *Ficus Palmata*, *Pyrus Pashia*, and *Pyracanth Crenulata*⁹.

Material and Methods:

The fresh fruit bark and root of *Pyrus pashia*, *Ficus palmate* and *Pyracantha crenulata* was collected from adjoining area of Ghat city (Dist- Chamoli, Uttarakhand) in the month of August. The plant was authenticated by botanist Dr. R. D. Guar, Department of Botany; H. N. B. G. U. Srinagar Garhwal The authenticated material was dried under shade and powdered by the help of mechanical process. The coarse powder of fruit bark and root was subjected to successive hot continuous extraction with

various solvent each time before extracting with next solvent the powdered material will be air dried¹⁰. After the effective extraction the solvent was distilled off and the extract was concentrated under vacuum. The various concentrated extracts were stored in air tight container for further studies.

Chemicals:

Alcohol, Hydrochloric acid, alcohol, and sulphuric acid, D. water etc all the chemicals and reagents used were of analytical grade.

Nutritional value:

Plant Name	% Moisture	% Fat	% Fibre	% Ash
Pyrus pashia	61.7%	0.5%	9.5%	1.3%
Pyracantha crenulata	60.1%	1.0%	7.4%	1.5%
Ficus palmate	65.2%	1.8%	11.5%	2.8%

Phytochemical screening:-

PP – Pyrus Pashia,

R – Root,

(+) – Present,

(-) – Absent,

FP - Ficus Palmata,

B – Bark,

PC –Pyracantha Crenulata,

F – Fruit,

Result and Discussion:

The results of physicochemical studies were tabulated in Table-1. The results of preliminary phytochemical study were tabulated in Table-1. The phytochemical study revealed the presence of steroids; phytochemical tests are helpful in finding chemical constituents in the plant materials¹¹. flavonoids, alkaloids, coumarins, triterpenoids, tannins and carbohydrate. The preliminary

Test	PPR	PPB	PPF	FPF	FPB	FPR	PCF	PCB	PCR
Carbohydrates/ glycosides									
(1) Molish test	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
(2) Fehling test	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
(3) Benedict test	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Alkaloid									
(1) Mayer's test	(+)	(+)	(-)	(-)	(+)	(-)	(-)	(+)	(+)
(2) Dragondroff test	(-)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(+)
Flavonoid	(-)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(-)
Saponins	(-)	(+)	(-)	(-)	(+)	(-)	(-)	(+)	(-)
Tannins									
(1) Pyrogall & catechol	(+)	(+)	(-)	(-)	(+)	(+)	(-)	(+)	(+)
(2) Gallic acid	(+)	(+)	(-)	(-)	(+)	(+)	(-)	(+)	(+)
Unsaturated sterol/triterpenes	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)
(1) Liebermann Burchard test	(-)	(+)	(-)	(-)	(+)	(+)	(-)	(+)	(-)
(2) Salkowiskis test									
Resin	(-)	(+)	(-)	(-)	(+)	(+)	(-)	(+)	(-)
Antimicrobial activity	(-)	(+)	(-)	(-)	(+)	(-)	(-)	(+)	(-)

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