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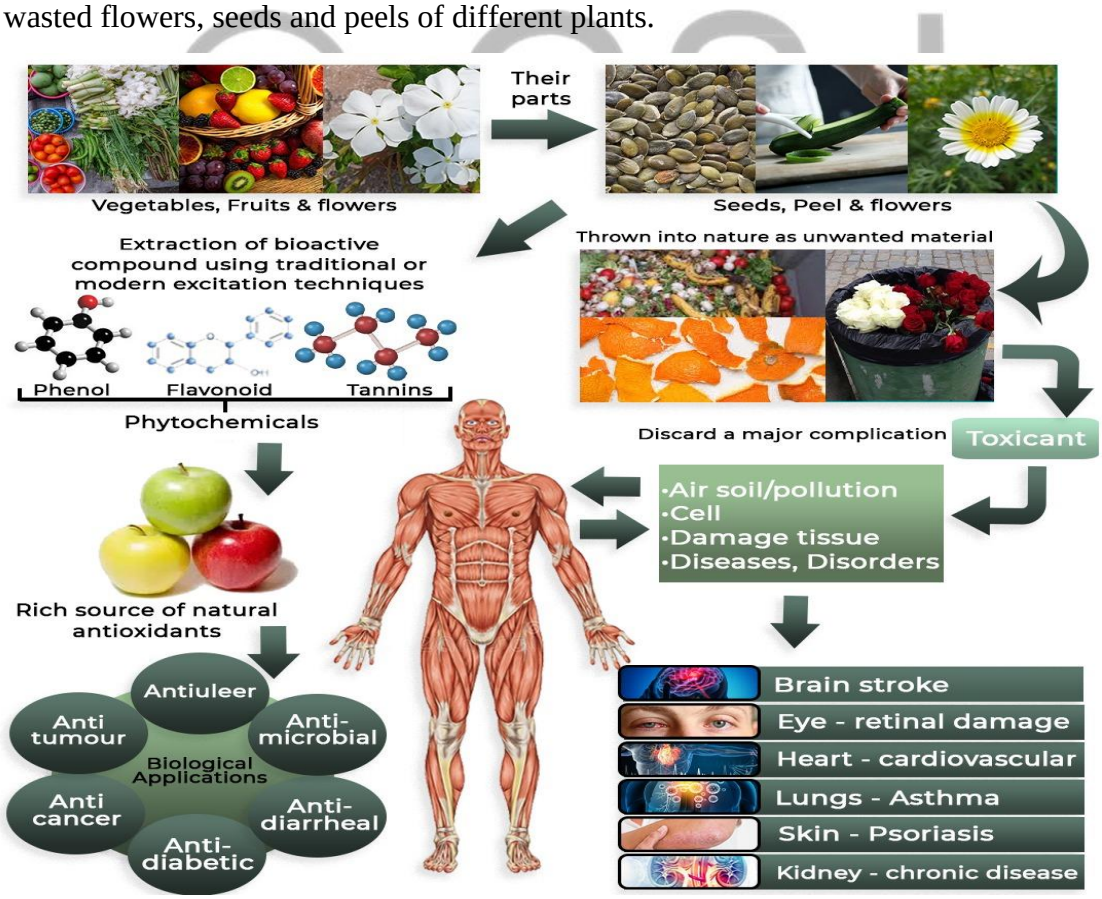
Best From Waste: Extraction of Bio actives And Supercritical Fluid Extraction, Traditional Use And Therapeutic Potential of Sacred Plants in the World: The Ayurvedic Wonder

ABSTRACT:

The valuable fruits, pomace, vegetable peels, seeds and flowers are produced and generated in wide range and also wasted in surrounding environment which cause pollution. Nevertheless, these valuable as well as contagious parts of plants like seeds and flowers endowed by phytochemical analysis and also more enough than that part of plant. To estimate and count this idea role, we have registered and signed up the flowers, seeds, peels, leaves, stem, roots and vegetative parts of different plants with their biological role and bioactive compounds in this present review. This review also summarized that structural analysis as well as comparative analysis should be review in future in order to estimate and verify the role of new drugs which has been synthesized from these wasted flowers, seeds and peels of different plants.



GRAPHICAL ABSTRACT

Key Words: Anti-Tumor, valuable fruits, Bio active compounds, Therapeutic potential, Cancer

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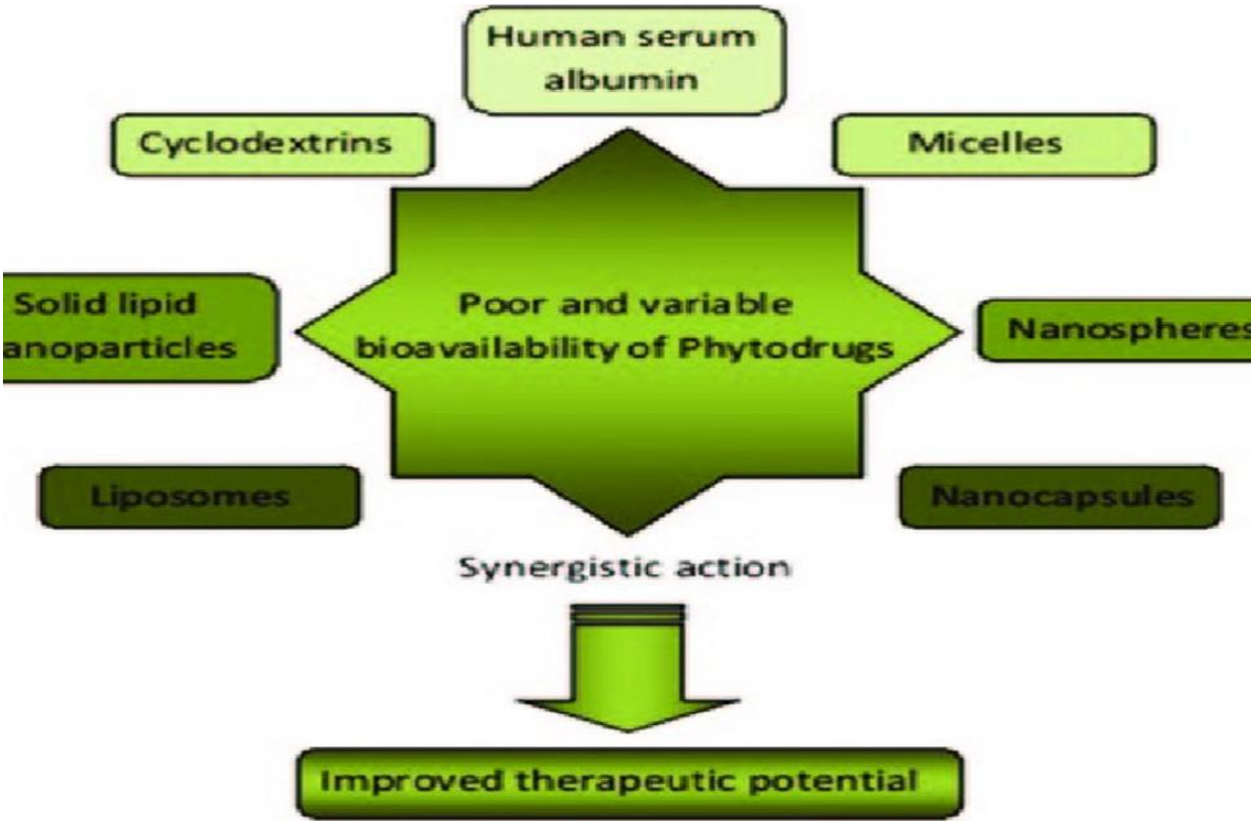
1: INTRODUCTION:

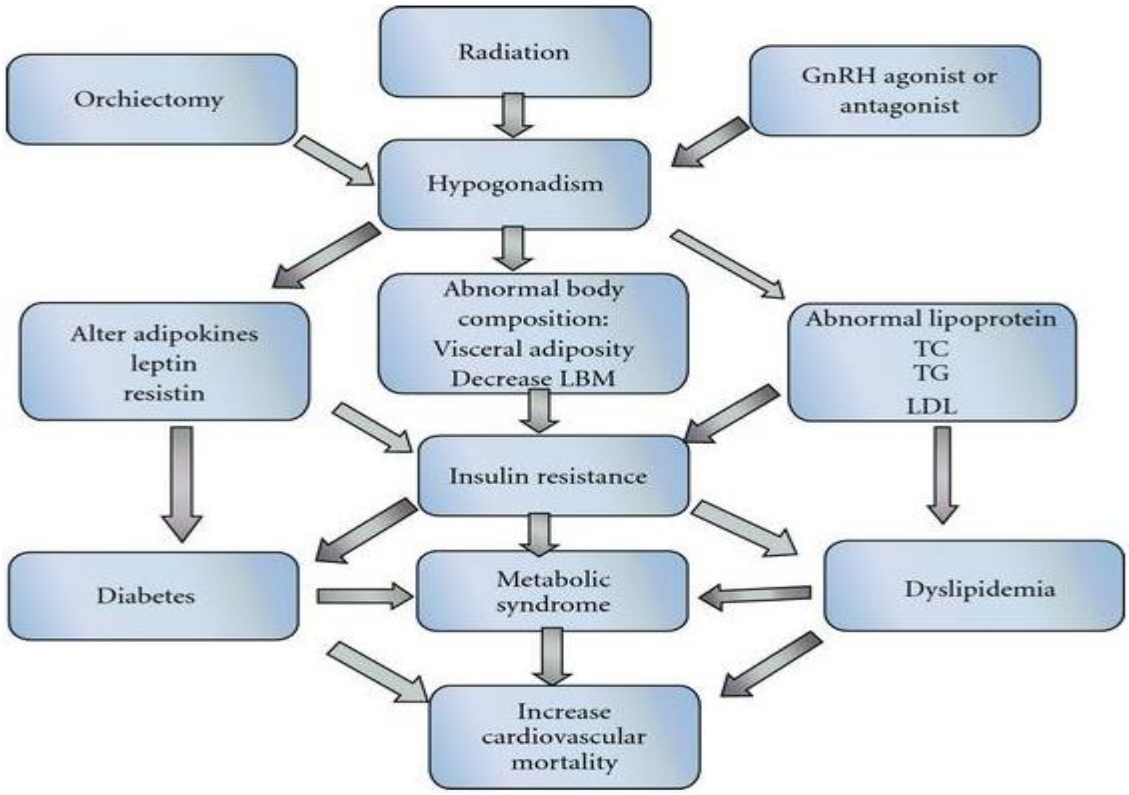
Novel therapies for numerous conditions and illnesses are frequently discovered using herbal products and their source. Flowers have been as medication for numerous ills since the beginning of time, and lately, this green remedy has become more popular. This is simply due to the fact that plants for medicine lack numerous negative effects usually connected with chemical medications, are widely accessible, and are inexpensive for any individual. There's a remedy for every disease in the huge variety of plants that are medicinal. They can either be as medications

themselves or as compounds of lead in the search for brand-new drug prospects. Many medications used to treat fatal conditions like malignancy are derived from plants. The biological functioning that plants perform includes a variety of processes. Beneficial hepatoprotective, anti-cancer, and synergistically anti-microbial properties Pterocarpus acts as an anti-allergic, antioxidant, and particular area of the plant is solely responsible for the therapeutic quality. Every part of the plant has medicinal benefits; for instance, the peels of fruits and vegetables have antibacterial capabilities. Nephelium skins shown hypoglycemic activity, officinalis fruit demonstrated anti-inflammatory properties, the leaves of Mangifera indica stem bark demonstrated antiviral operation, aerial parts of the genus Poly demonstrated a liver-protect property, peel demonstrated antimicrobial agents and antidiarrheal operation, and the o Punt indica seed oil demonstrated protection against gastric under (Jucá *et al.* 2020).



Stems demonstrated antioxidant capability, while the squamosa Annona leaf demonstrated anticancer impact, the papaya flowers demonstrated antioxidants and antibacterial qualities, Beta tetra root demonstrated antibiotic and anticancer effects, etc. Plant compounds such alkaloids, flavonoids, phenols, tannins, saponins, glycosides, steroids, etc. are abundant in plant components. However, their concentration varies from part to part, and as a result, each plant portion's medicinal value differs. Although the stem of a plant or seed may not exhibit comparable antioxidant properties, the leaf could have very good antioxidant properties.(Ghaffari *et al.* 2020).

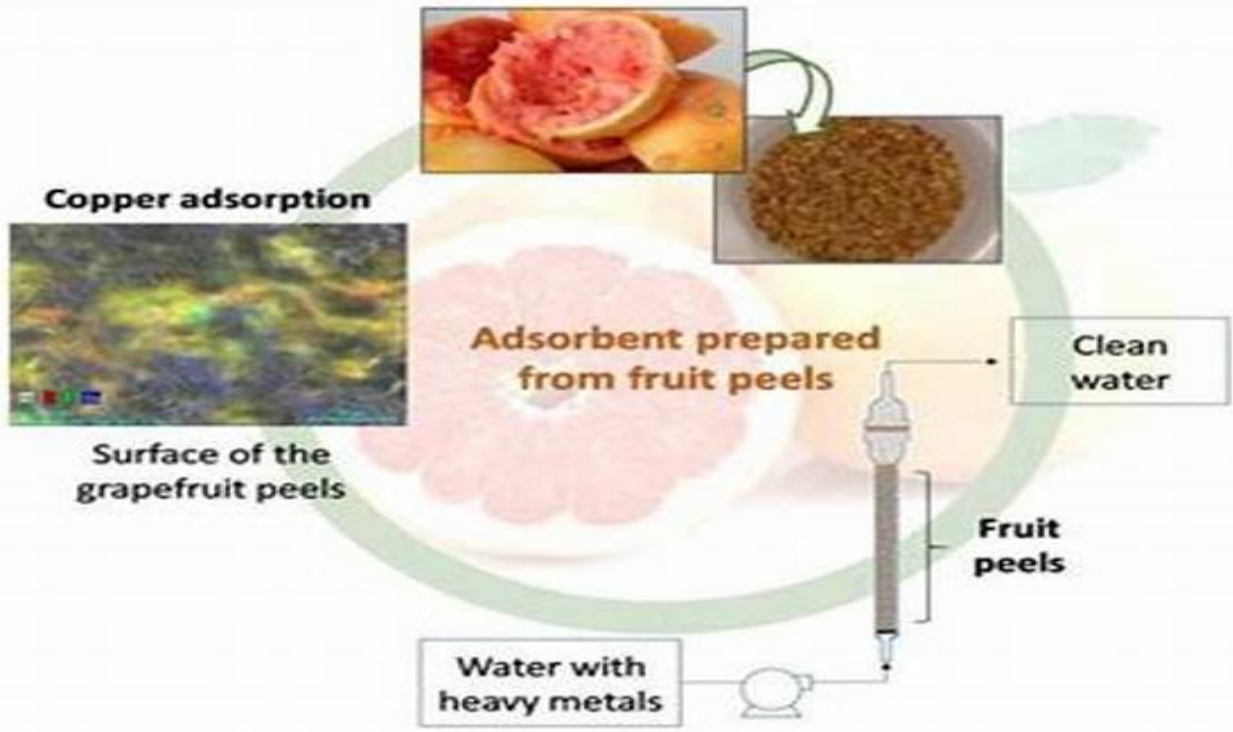
The plant constituents can work alone or in concert. Plant second-generation metabolites generally bioactive chemicals that play vital roles in plant growth, growth, fertilization, and from predators and environmental hazards but are not necessary for survival of plants. Peelings and seeds from fruits and vegetables generate a lot of biological waste that is dumped into the natural world. They can be employed as an organic source of an antioxidant antibacterial, antiulcer, or hypoglycemic agents, though. Similar to other components of plants, they are abundant in different botanical constituents. This is the best use of the waste because the medical application of these components will lessen the harm to the environment.(Gupta *et al.* 2020)



Processed food can be thickened and gelled by using wasted vegetable peels, seeds, or blossoms. Colorants, emulsifying natural oils, chemical acids, and elements can be used as a substance for yeast fermentation to produce enzymes in them, the use of bio- or a solution of plastics that degrade, biofuels, fertilizer that pesticides made from bio-preservatives, or grow mushrooms, among other things. Eggs come in a wide variety.(Iravani *et al.* 2020).

A few seeds are consumed with vegetables and fruit, others can be used as spices, while other seeds are discarded into the natural world. But seeds can be used medicinally and have a variety of botanical constituents. The medicinal benefits of seeds included the healing of wounds, ant diabetic, antibacterial, antiseptic, antioxidant, and calming. All of those features are a result of the plant-based constituents which are found in them in different amounts and operate singly or in concert. The grain extraction of demonstrated antimicrobial properties. (Hazarika *et al.* 2017)

The species Pseudomonas spp. demonstrated suppression in the seed kernel of mango sativa. The citrus sinensis seeds were used to make oil that had antioxidant properties since the seeds included phenols, which carotenoids in Phytosterol as and -tocopherols. The seeds and fruit plant consist of chemical compounds such the acids gallic acid, a substance known as and a compound called while the seeds of this plant contain a substance known as gallic acid, ET acidity. (Ikram *et al.* 2021).



The study by Parikh and Patel showed that these phenolic had antioxidant action. Phoenix dactylifera seeds from 11 different types were tested for phenol, to form. The seeds and fruit plant consist of chemical compounds such the acids gallic acid, a substance known as and a compound called while the seeds of this plant contain a substance known as gallic acid, et According to et al., polyphenol content and inhibition activity directly correlate, as do flavonoid and anthocyanin content and antibacterial and antioxidant capabilities. Cucumber melodramatic seeds and peels demonstrated anti-inflammatory and anticancer properties. (Jain *et al.* 2017).

The phenol in a flavonoid supplement and tannin content of the seeds and peels was discovered to be directly correlated with preventive and curative properties. The seeds and fruit plant consist of chemical compounds such the acids gallic acid, a substance known as and a compound called while the seeds of this plant contain a substance known as gallic acid, ET Antioxidant activity was displayed by the seed starch of Eriobotrya oriental. The unripe fruit seeds showed more polyphenols and more antioxidant capacity than ripe fruit seeds. The seed coat of exhibited antioxidants and antihypertensive effects.(Fahimirad *et al.* 2019)

They were abundant in flavonoids and phenolic acids at that time. The seeds and fruit plant consist of chemical compounds such the acids gallic acid, a substance known as and a compound called while the seeds of this plant contain a substance known as gallic acid, et The total phenolic, non-tannin phenolic, epicatechin, Chlorogenic acid, 2,4-dihydroxybenzoic acid, 2,5-dihydroxybenzoic acid, and garlic acid were all present in the watery extract, which shown increased antioxidant properties. On the other hand, the propane extract displayed more antihypertensive activity and Cu2+ chelating capacity; it also included greater quantities of quercetin. (Piccirillo. 2019).

The seeds and fruit plant consist of chemical compounds such the acids garlic acid, a substance known as and a compound called while the seeds of this plant contain a substance known as garlic acid, et It included more quercetin, propranolol-3-rutinoside, ferulic, and p-comedic acids than other samples. Only condensed tannins, syringic acid, and -epicatechin were present in the extract made with ethanol. The seeds and fruit plant consist of chemical compounds such the acids garlic acid, a substance known as and a compound called while the seeds of this plant contain a substance known as garlic acid, to extract the Phytoconstituents or bioactive chemicals from this waste products and to have a specific activity, the extracting solvent is crucial. Parkia Particularly notable seeds have antibacterial and antioxidant qualities and contained phenols, which flavonoids, or terpenoids and tannins.(Dinda *et al.* 2019).

There is an important relationship in the middle of flavonoid and biological Sphoto catalytic and antimicrobial there activity. The pulp seed peel of four avocado types are explored for their antioxcidant and antibacterial activities. The peel and seed express more antioxidant action because they possessed more antioxidant compound flavonoids and phenol. Same result are form in peel and seed fuerte and Hass avocado activities more in peel accept by seed (Mirza *et al.* 2021).

Datura stramonium seed showed anti-inflammatory activities in carrageenan in which wistaralbino rat of paw edema model Moringa oleifera seeds leaves and roots showed anti-inflammatory and anti-oxidant effects. All the parts are more in phenolic and flavonoid. There is a direct relationship between observed activities and phytochemical content Pouteria compecbiana seed polysacd chaired altrasonic assist remove showed disinfectant activity. Mending effect is shown by seed of chrysophyllum albidum .Gacina mangostana seeds and peel are waste material that may be reused into pharmaceutical application and medical and application due to their properties and structure (Mirza *et al.* 2021)

They have antimicrobial properties and therefore it is a suitable bio-filler in natural rubber product like medical gloves rubber toys and hot water bottle etc. Buchholzia and Garcinia Kola both are seeds that are show antioxidant activity Kola and B.Coriace seeds contained phenol and flavonoids alkaloid spooning and tannins. Just now many Matel nanopartical are being synthesized from seed extract which express many biological activities.(Salehi *et al.* 2019)

Sliver nanopartical formed by using seeds extrects from trigonella foenum-graecum showed anticancer activity while seedsexrractof pendulum murex showed antimicrobial activity.Elettaria cardamomum seed extract showed anticancer activity. Vegetable and fruit peel are examine as one of the most waste product of food industry .There is enormous amount and throw out into the environment increase pollution. However they express many medicinal activity it is used for the production of many value enhance of product.(Kumar *et al.* 2018)

Peel has many valuable phytoconstituents that are used for pharmaceutical pharmacological purposes. Researchers collect numerous components that are having antioxidant, antidiabetic, anticancer, antimicrobial, hepatoprotetive, antiobesity anti-inflammatory from different peels Anti helicobacter pylori cytotoxic activities and the peels of Actinidia delicichata osa showed antibacterial whereas the peel of Cucurbita moschatashowed antimicrobial antioxidant and mending properties. Both the Anti-salmonella and Antioxidant activities of eggplant peel are describe by Rochin-Medina et al.,The peels of citrus reticulate fruit have both anticancer and antibacterial properties that are reported they have flavonoid, phenols and coumarone compound .And the peel of Mangifera indica express the Antimicrobial, Antioxidant Anti-inflammatory and anticancer activities .In the peels the bioactive compound are polyphenols that are responsible for result .The antidiabetic effects showed by the combination of both Allium sativum and Allium Cepa. (Mahmood *et al.* 2018)

The antibacterial activity against Cronobacter sakazakii are showed by the peels of Punica granatum the peels are rich in polyphenolic compound mainly hydrolysable polyphenolics like elligitannins alpha and beta punicalagin are used by ellagic acid punicalin.Antimicrobial activity of P.granatum peels also describe by Al-Zoreky. The peels of Citrus sinessis, citruss grandis, punica granatum and Ziziphus jujuba are rich in coumarins,punica granatum peels are rich high molecular weight phenol like beta and alpha punicalagin and low moiecular weight phenol like phenol like gallic ellagic acid and granatin. .All these secondry metabolites are responsible for the anti-inflammatory actiovities .The polyphenolic content are rich in the peels of Nephelium lappaceum that are responsible of effects of antidiabetic disease .The Christi janti et al are discribe the antioxidant and antidiabetic effects from the Aloe vera peels (Dinan *et al.* 2021).

The antimicrobial activity of furits peel extract of pouteria caimito was reported by Abreu et al. The genus pouteria were rich in triterpenes and flavonoids, Actinidic Kiwi peels showed antioxidant, antimicrobial and anticancer. They contained flavonoid and polyphenols Banana peels showed antimicrobial and antioxidant activities because the bioactive compound is present in peels of Banana. The peels had aboundant phenolic content in which include the flavones , flavan-3-ols and dride peels powder had epicatechin , gallocatechin catechin and procyanidin the antioxidant and antitumor both activities of Nendran banana peels rich in phenol ,flavonoid and caretonoid content are reported by the Kumar et al The powder of Litchi chinensis peels show effect against hepatoprotetive and antiobesity properties . These peels contained anthocyanins polyphenols and flavonoids. (Obidiegwu *et al.* 2020).

The citrus sinessis, citrus limonia and Musa acuminate peels show the antibacterial activities against of microorganisms. The trace element like zinc magnesium and polyphenolic have rich peel. Matel nanoparticals of silver ,gold ,zinc are synthesize by using the peels and also show various activities For example Prunus persica peels synthesize by silver nanoparticals and showed the antioxidant activities Antibacterial and antioxidant activities were reported by gold and zinc nanopartical are formed by citrullus lanatus and prunica grantum peel flower are used as cosmetic and phytotherapeutical more oil are exerct from flower like lavender jasmine rose and orange blossom are use in aromatherapyand perfumes because of their calming and sooting effects These flower shows a number of charactistics like antibacterial, antioxidiant ,antimicrobial, antiulsar ,antidiabetic, hepatopropective,anti-inflammatory, anticancer .Woodfordia fruticoza flower showed protective effects against of acetaminophen in which include hepatic toxicity in rats .The flower contained flavonoid and phenols like caffeine and o-coumaric acid ,quercetin and benzoic acid. The antioxidant and antimicrobial activities are showed by Agastache rugosa flower and these activities are characteristic bioactive molecule that are present in the flower which

includes the terpenoid, phenylpropanoids and carotenoids .Oil are obtained from Etlingrea elatior using subcriticals carbon dioxide showed antimicrobial activities the major chemical compound are flavonoids polyphenols and tannins (Nadeem *et al.* 2019).

Flower obtained of vernonia amygdalina showed antioxidant and microbial anti activities The flower had two antioxidant and luteolin which are responsible for the observed antioxidant and antibacterial activities .Begonia semperflorens flowers showed hepatpprotective and neuroprotective characteristic .The report of some biological activities of some seed flower peelrs These seeds belongs to 17 families *like,* Asteraceae Arecaceae, Fabaceae, Moringaceae, Cucurbitaceae , *Clusiaceae , Malvaceae , Myrtaceae, Pedaliaceae, Rhamnaceae, Rosaceae , Rutaceae,Zingiberaceae , Sapotaceae, solanaceae, Capparidaceae* .(Sharifi-Rad *et al.* 2022)

The peels belonogs *Lauraceae* to 15 families *Actinidiaceae , Amaryllidaceae ,Anacardiaceae , Bromeliacae , Lythraceae ,Caricaceae, Masaceae , Asphodelaceae ,Sapindaceae, Sapotaceae, Solanaceae, Lythraceae, Musaceae ,Rosaceae,Rotaceae* .The flower belongs to 12 familirs , *Rhammaceae ,Cucurbitaceae, Fabaceae ,Lmiaceae Malvaceae, Zinggiberaceae, Sapinndaceae Rubiaceae. (Akbar et al. 2018)*

In the end the summarize the therapatical potential waste of plants .e.g , biological activities of seeds peels and roots and flowers .These parts of paints are thrown onto the ground and successfully exploited as a natural source for activities like antimicrobial antioxidant antcancer antiulcer wound healing properties There are mostly crude extracts therefore it have to be done by various extraction application and mechanisms of action . The photochemical and structure characterization are involve to be done worked out So it is not definitely waste and can be therapeutically useful It show the double advantages of decrease pollution and increase naturally occurring bioactive compound which can be an therapeutically useful in our daily environment. (Qamar *et al.* 2018)

SEED					
NO:	Plant/Family	Solvent	Assay	Activity	Reference
1	 Chrysophyllum albidum G.Don/Sapotaceae	n-HE	TLP, TTC, AC, TAC, DPPH, OH, MIC	Antimicrobial, Antioxidant, Wound healing	Babatunde et al.. 2019
2	 Citrus sinesis (L.) Osbeck/Rutaceae		TC, TPC, TCP	Antioxidant	
3	 Cucumis melo L./ Cucurbitaceae	AQ, HME, HET	TPC, TFC, TT, OH, RP, MTT	Antioxidant, Antiproliferative, Cytotoxicity	
4	 Cucumis melo L./ Cucurbitaceae	80%ME	TPC, DPPH, LAS, RP, TEAC	Antioxidant	
5	 Datura stramonium L./ Solanaceae	PE, 70% ME		Anti-inflammatory	

2: MAGNIFIER INDICA L. / ANACARDIACAE:

Mango associate with the family Anacardiacae is one of the integral fruit globally, in both synthesizing and devouring nations. Mangoes on the other hand are pivotal fruit that blossoms swiftly at normal temperature. Mangoes go through a variety of chemical and physical changes that make them vulnerable to spoilage of food when subjected to external factors such as microbial contamination post-harvest management and preservation. Due to the intrinsic nature of mango there are distinctive loses of agronomic loses across the distribution chain.(Ashraf *et al.* 2020).

The main reasons of qualitative loses of mango are, inappropriate picking of mangoes, management, packaging and preservation that results in nectar burn, discoloration, chill trauma, rotting or microbial and pest harm. In emerging nation where post-harvest technology is limited with weak infra-structures, post-harvest loses are quite common. Based on varieties of mango and pre-harvesting processing, post-harvest couldn't exceed value of 50%. By post-harvesting technique, top notch persistence of mangoes across distribution network has shown to be distinctively impacted.(Khatoon *et al.* 2020)

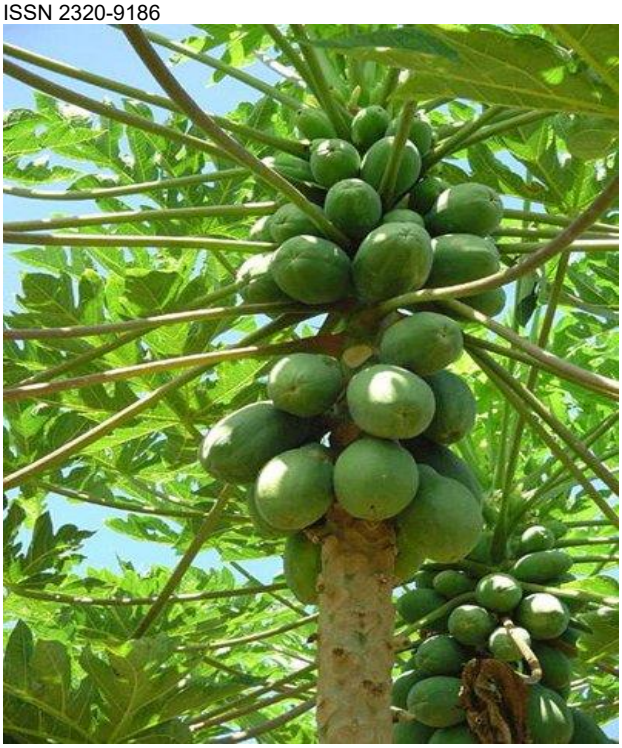
3: MUSA ACUMINATE COLLA/ MUSACEAE:

Herbal remedies (such as extraction of nutrients from leaves) have played an important role in human health as well as in the field of medicines during civilization. For so many eras' tinctures and pallets, Phytoconstituents have been used congenitally to treat a variety of ailments according to an ethno-medicinal documentation. The value of plant extracts in the field of medicines and healthcare has increased significantly during civilization. The oldest use of tinctures, pellets and Phytoconstituents has been documented in ethno pharmacological history for so many years. According to the old beliefs a variety of these herbs used for medicinal purposes, recently some experiments have shown that they are quite effective.(Khalid *et al.* 2018)

The World Health Organization, which is institute of global health have predicted that in emerging nations, a group of people depends upon conventional treatment for their basic health needs. The demand for herbal remedies have increased in both advance and emerging nation. Moreover a major portion of them have been still acquired from wild source without any contribution of scientific method this is the reason that many of the species are at greater risk of being wiped out from the world. Vegetables and fruits has been considered the significant factor of a healthy meal. Various fruits such as apple provides us major advantages of medical health.

4: CARICA PAPAYA L. / CARICACEAE

An ancient medicinal plant used in herbal remedies is Carica papaya L. The leaves of this plant as an extract or infusion are used to lower hypertension as well as to maintain the level of insulin in diabetic patients. However fresh leaves' extract are used to cure fever. Imbalancement of hormones during menstruation is considered to be curable with the help of leaves leaf extracts or sap of Carica papaya L. Caricaceae. There has been enthusiasm of using the papaya plant as a supplement to primary care to increase hematocrit levels particularly in patients with dengue fever.it also shows greater contribution in fight against cancer.(Sahu *et al.* 2021)




The use of Carica papaya leaves are helpful to treat thrombus cytopaenia in dengue fever and this property shows the effectiveness of papaya plant.in order to support the hypothetical activity and therapeutic advantages, different researches are performed. Low level of blood sugar and low level of lipids are commonly treated with C. papaya leaves which shows the indication of their effectiveness these leaves also have the antibacterial property, tissue repair capabilities and a significant feature to deal with gastrointestinal issue. Presence of various chemical compound in papaya leaves including carotenoids, opioids, terpenoids, corticosteroid and large number of Phytoconstituents shows that may take part in the biological processes collectively.(Lum *et al.* 2022)

5: NEPHELIUM LAPPACEUM L. /SAPINDACEAE:

The remarkable effectiveness of antioxidants present in them is drawing the spotlight for their increasing demand because these antioxidants have particular role to treat early disease symptoms. According to various researches, antioxidants are not only helpful to prevent the onset of disease but they also have the capability to treat severe disorders such as osteoarthritis, disease of coronary artery, cancer, neurological disorder and diabetes etc. Due to the powerful antioxidant properties, fruits like African mango puree and guava are the best antioxidant rich tropical fruits. The proximate composition of many fruits shows that antioxidant property is present in their shell and seed and this is something fascinating to know. Several exotic fruits' antioxidants capabilities have just been documented. (Qin *et al.* 2019)


There aren't enough research, though, on the viability of rare fruits like Nephelium lappaceum and Nephelium rambutan-ake. The Sapindaceae family includes the tropical fruits N. lappaceum and N. rambutan-ake. Philippines, Indonesia, java, nether land, sari lanka are the regions where these plants are present predominantly. . The hotter climates of south China, Taiwan, Tasmania, and Hawaii have also been used to grow N. lappaceum. Locals call N. lappaceum and N. rambutan-ake pulasan, respectively known as rambutan and rambutan-ake. In contrast to "pulasan," which is derived from the Malay "pulas," which indicates twist, "rambutan" is a term that signifies "hair. N.lappaceum can be consumed either in the form of jam and pickle or it can be taken in fresh form.one can also bake and eat their seeds.in addition to all that this fruit the root infusion of N.lappaceum has significant property to cure fever.(Zolnourian *et al.* 2019)

6: PRUNUS PERSICA L. / ROSACEA:

According to the zho shi hou, in western countries, the elongated shape of peaches was one of the reason of their of botanical interest.in Tasmania, ‘Australian Saucer’ peaches were firstly given by Chinese before being brought to the US. Plump peaches have been brought to Sicily about 1950, and are currently grown in a few specialized locations under the label "Tabacchiere." Very likely the first plump peach intended for food market usage was really the cultivar Stark Saturn, developed as NJF-2 by L.F. Hough at Rutgers University and sold by Starks Garden. (Kabeer *et al.* 2019)


The primary characteristic of this variation has been its cold endurance, which opened up more conditions for this varietals type's production. Farming methods for plump peaches just began at the tail of the 1980s; they were mostly relying on 'Stark Saturn,' in French, Italia, Taiwan, and the America etc. As a support for a notable increase of the product category for this peaches type in multiple regions, Spanish had since the early 2000s placed a stronger focus on plump mating, with some projects currently in operation.(Bahru *et al.* 2019)

7: CHRYSOPHYLLUM ALBIDUM G.DON./SAPOTACEA:

African star apple have a place with family sapotacea, a plant animal groups normally found in different vegetation zone in Uganda, Nigeria, Niger republic, Cameroon and Coted'coire C. albidum is occasional natural product generally accessible during dry season (December to Spring) with a little to medium tree species, up to a level of 25 - 37 meters having a developed circumference differing from 1.5 to 2.0 meter. It is viewed that as C. albidum contain high measure of ascorbic corrosive when contrasted and orange, cashew, and guava , other Nutrient, iron, food flavor, fat, starches and mineral components such sodium, magnesium, potassium and so forth .


The seeds are an excellent source of oil, which can be used for a variety of purposes. Albidum has a variety of medicinal uses for its roots, bark, fruit pulp, and seeds. An example is Anan., et al. , Sayyar and Olorunnisola, et al. reported that in southern Nigeria, the roots, bark, and leaf of C. albidum are used as a natural remedy for sprains, bruises, and wounds. They also prevent the microbial growth of known contaminants that cause wounds. The high saponin content of C. labium leaves and roots legitimizes the utilization of the concentrates to control human cardiovascular sickness and decrease blood cholesterol as reported by Alter.(Srinivas *et al.* 2017)

8: CITRUS SINENSIS (L.) OSBECK/RUTACEAE:

Photobiotic and other plant-based active ingredients can be found in some or all portions of a plant. Some of them have healing medical qualities. The majority of these substances are with low molecular weights and derived from secondary metabolism. They include glycosides, alkaloids (lactones, esters, ethers, ketones, aldehydes, and alcohols), polyphenol and phenolic compounds (coumarone, tannins, flavones, and quinines), terpenoids (steroids and sesquiterpenes), flavonoids, oil essences, mucilage's, and Saponins. Many of these substances are created to protect against external threats like viruses, environmental conditions, and physiological stress. Animal development, performance, and health are typically impacted by photobiotic due to their antibacterial effects and immune-boosting properties. (Iqbal *et al.* 2018)

The precise processes through which photobiotic as agents promote the growth of broilers are frequently unknown. While some studies have discovered that these components improve broiler efficiency, others haven't demonstrated a significant impact on feed intake, feed digestion percentage, or excess weight. Despite being acknowledged that phytochemicals have become known to be organic additions, research on their dietary adaptability, toxicity, action mechanism, and safe use is required before their widespread adoption. The anti-microbial and anti-toxic qualities of various herbs and their extracts, as well as the current restriction on antibiotic usage in the poultry industry, are the key drivers behind the use of dietary additives in the nourishment of animals. Plant substances that impact gut microorganisms can help balance the micro biome.

9: CURCUMAS MELON L. / CUCURBITACEAE:

Reducing the disposal of food represents one of the European Commission's goals in order to accelerate Europe's shift to a circular economy. Organizations with a circular economic model preserve products' additional value for as much time as feasible along the supply chain while also stopping the generation of waste. When a product reaches the conclusion of its intended lifespan, they continue to use the assets in the economy so that these can be used competently and produce more value. The adoption of this economic system encourages sustainable growth, increases competitiveness around the globe, and creates new jobs. Food scraps is defined as any sort of food stuff that is discarded between the source of production and its consumer's plate at any point throughout a food's development process, whether it is either uncooked or prepared.

Due to the large numbers of strips and particles that are typically thrown, the fruit juice industry is a major generator of food wastes. The inclusion of these remnants in a person's diet, particularly those that are high in nutritional value, fiber, lipids, and naturally occurring compounds with useful qualities In order to minimize food shortages, waste, and environmental effect, it is crucial for consistency to use food remnants in the design and development of

innovative goods with additional benefits. Indeed, one of the finest and most significant difficulties facing the global food business is the production environmentally friendly food, which should be centered on reducing expenses, enhanced product diversification, and satisfaction of consumer expectations.(Liu *et al.* 2020)

10: DATURA STRAMONIUM L. / SOLANACEAE:

- Datura metal is a brief bush that grows 0.5 to 2 meters tall, rough, upright, branching, glossy or slightly hairy in appearance.
- Single, oval to oblong-ovate, 9 to 18 centimeter long leaves with irregularly and shallowly lobed borders, an in-equilateral base, and a pointy tip.
- Flowers are axillary, single, and white to nearly purple with a big ovary. Green, 5-8 cm long, cylindrical, and segmented into uniform teeth at the top, the calyx is also cleaved. The trumpet-shaped corolla is white, 12–16 centimeters long, and has a mouth that is around 8 centimeters in diameter. Five stamens with a two-fid (lobed) stigma.
- Round, green, 3.5 centimeter-diameter fruits with sturdy, short spines that split apart at the tip when mature and produce an uneven membrane make up the fruit.

11: DURIO ZIBETHINUS L. / MALVACEAE:

However, the meat is not the sole component of the fruit or vegetable that contains substances that may be good for your health. Seeds, rinds, and hulls, that are typically discarded, have also been examined and found to have substances with biologic activity. (Cargnin *et al.* 2017)

Additional study on these elements may increase the therapeutic value of durians while also helping the pharmaceutical businesses. The variety of bioactive components found in durians fluctuates with the rate of maturing or with different durian breeds, and investigation have been undertaken on the fruits' abilities for therapeutic purposes, dietary benefits, and ability to improve diets, along with the possibility for treating diabetes, cancer, and inflammation.(Ahmed *et al.* 2020)

CONCLUSION:

In conclusion and deduction, this review recapitulates the therapeutic prospective and their potential of bio unused of different plants i.e. biological activities of kernels, peelings and plant life. These portions which are commonly unnerved into the surroundings can be magnificently demoralized as a ordinary basis for actions comparable anti-ulcer, hepato-protective, antioxidant, antimicrobial, ant diabetic, anticancer, would healing, etc. possessions.

These are frequently rudimentary sources consequently exhaustive trainings have to be completed by means of various removal methods and their contraption of accomplishment has to be worked out. Mechanical description of different phytochemicals convoluted also essentials to be controlled. But unquestionably they are not left-over and can be intensely valuable. It has twofold benefit of declining contamination and cumulative certainly fashionable bioactive mixtures which can be medicinally valuable.

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