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Study of few poisonous plants from Poladpur taluka in Raigad district of Maharashtra state

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Abstract
The paper deals with survey of poisonous plants of different families of angiosperms from Poladpur taluka of Raigad district of Maharashtra state was under taken during 2018-19, The present paper deals with information of poisonous plant parts, local name, family and phytochemical constituents. The detail information taken from local peoples, vaidus, buvas and also from the literature. There are about 18 different families, 21 genera and 25 species have been recorded during field visit.

Keywords: Poisonous plants, phytochemical constituents, Raigad

Introduction
Poladpur taluka of konkan region is very well known for its huge Biodiversity of flora and fauna. The area has forest situated on its surrounding mountains. Sahyadri hills has huge reservoir of enormous natural resources including vegetation wealth and traditional knowledge of medicinal plants and also poisonous plants.

Study area: As per the Socioeconomic Survey of 2018-2019, the total geographical area of the district is 6.87 lack hectare out of which 29.87%, area is under cultivation, 7.57% uncultivated, 21.65% under forest, 8.00 under miscellaneous plantations, 22.68% under non agricultural use and 18.23% is barren and uncultivable waste. It lies on the National Highway NH 17 Mumbai Goa Highway.

Material and methods:
The plant survey were conducted during the month of June 20018- to June 2019 in several villages of Poladpur taluka of Raigad dist. There are Mahadeo koli, thakur katkari and vaidhus and rural peoples were using medicinal plants but they also know about the poisonous plants, Attempts will be made in this study to select certain locations of Poladpur taluka Raigad district. The poisonous plants were collected from different villages of Poladpur, All collected specimen deposited and preserve in department of Botany in Sundarrao more College Poladpur Raigad, The standard method of collection of plants and preservation and maintenance of specimen in herbarium will followed technique. Jain *et al*. (1977) [4] Singh *et al*. (2008) [11] Rao *et al*. (1990) [10] all collected specimens was correctly identified with flora of Kolhapur district. Yadav et.al 2002) [9], although a number of reports are available of poisonous plants of different districts in India (Caius 2003 [1], Neuwinger. H.D. *et al*. (2004) [8], Dash *et al* Dogra S.K *et al* (2005) [3], the poisonous plants were responsible for skin irritation, vomiting, paralysis and inflammation from family Nyctaginaceae, abortification is due to *Gloriosa superba.* L, Fish death is occurs due to the use of leaves of *Gnida glauca* (Fresen) Gilg. The seeds of *Datura metal.*L.is very high toxic to human beings, white latex/ coloured sap found in families of Apocynaceae, Aascelepiadaceae, Papaveraceae, Euphorbiaceae, of used in excess always act as a poisonous some plants contain alkaloids glycosides, resins triterpenoids saponins, diterpenoids, flavionoids lignans, phenolic glycosides, cannabinoides and polypeptides etc. Mayuri (2003) *et al*. The detail about poisonous plants Botanical name, plants parts poisonous and phytochemical table No.1.

Table 1: Shows the list of identified poisonous plants along with family Botanical name, local name, poisonous part, phytochemical constituents.

Sr. No.	Botanical name	Local name	Family	Poisonous part	Phytochemical
1	*Abrus precatorius* L.	Gunj	Papilionaceae	seeds	Terpenoids, saponins beta-D -glucopyranosyl
2	*Argemone Mexicana* L.	Piwla dhotra	Papavaraceae	Seeds and latex	Alkaloid, dehydrocoryalmine, columbamin, jatrorrhizine. oxyberbeine, corypalmine.
3	*Acalypha indica* L.	Khokli	Euphorbiaceae	Latex	Acalyphine, flavonoids 235
4	*Albizia procera* (Roxb) Benth.	Kinai	Mimoceae	Latex	Triterpenoids saponins, diterpenoids, flavionoids lignans, phenolic glycosides,
5	*Caesalpinia pulcherrima* L.	----	Caesalpinaceae	Latex	Tannins, flavionoids, steroids and alkaloids
6	*Calotropis gigantea* L.(Ait). R.Br.	Rui	Asclepidaceae	Latex	calatropisequiterpenol, calatropisesterphenol, calotrobenzofuranone
7	*Calotropis procera* L.(Ait) R.Br.	Rui	Asclepidaceae	Latex	Proceroleaneol A, calatropisequiterpenol, calatropisesterphenol B, calotropoleamyleste, beta-D-glucopyransoside 2
8	*Cardiospermum halicacabum* L.	Kanphuti	Sapandaceae	Seeds	Alkaloids, saponions, flavonoids.
9	*Carica papaya* L.	Papai	Caricaceae	latex	Alkaloids, flavonoids, glycosides, reducing, sugar, saponins, steroids, tannins,
10	*Cassia fistula* L.	Amaltas	Caesalpinaceae	Seeds	Furfural, oxyanthraquinones, chrysophanol, crysophanein.
11	*Cassia tora* L.	Takla	Caesalpinaceae	Seeds	Anthraquinone, Rhamnoside, Chrysophanol, emodinn, betasitosterol, pyrrolizidine, alkaloids
12	*Catharanthus roseus* (L).G.Don	Sadaphuli	Apocynaceae	Latex	Terpenoids, phenylpropanoids, alkanes, pyrrolizidine
13	*Dendranthema indicum* (L)Des.Moul.	Shevanti	Asteraceae	Seeds	Isoborneol, Monoterpens
14	*Clitoria ternatea* L.	Gokarna	Fabaceae	Seeds	Steroids, triterpenoids, saponins, resins, tanninsand starch.
15	*Cuscuta reflexa.* Roxb	Amarvel	Cuscutaceae	Stem	Glucosides. flavonoids.
16	*Datura metal* L.	Kala Dhotra	Solanaceae	Seeds	Alkaloids, flavonoids, phenols, tannis, saponins, sterols, daturodiol, daturolone, hyoscine,
17	*Dioscorea bulbifera* L.	Karinda	Dioscoreaceae	Latex	Alkaloids, flavonoids, resins, saponins,
18	*Eucalyptus globosus* Lab.	Nilgiri	Myrtaceae	Seeds	Monoterpens, sequiternenes, aromadendrene, alpha -phellandrene
19	*Euphorbia heterophylla* L.	------	Euphorbiaceae	Latex	Ingenolesters, euphorcinol
20	*Euphorbia hirta* L	------	Euphorbiaceae	Latex	Alkaloids, flavonoids, tannins, steroids, glycosidesand carbohydrates
21	*Euphorbia pulcherrima hirta* Willd. ex. Klotz.	-------	Euphorbiaceae	Latex	Alkaloids, steroids, glycosides and, Beta cyanin, phlobatanins,
22	*Gloriosa superba* L.	Kal-lavi	Liliaceae	Stem	Alkaloids, flavonoids, glycosides, terpenenes, steroids.
23	*Gnida glauca* (Fresen) Gilg.	Datpadi	Thymelaeaceae	Leaves	Tannins, Terpenoids, steroids, flavonoids.
24	*Jatropha curcus* L.	Mogali Erand	Euphorbiaceae	Seeds	Apigenin, o-beta-D neohesperidoside, apigenin,7-0-beta-D-galactoside, orientin, vitexin, vicenin.
25	*Martynia diandra.* Glox	Wagh Nakhi	Nyctaginaceae	Seeds	Glycosides, tannins, carbohydrates, phonols, flavonoids and anthocyanin, chlorogenic acid, snapic acid stearic acid.

Results and discussion

The present work describes the phytochemical constituents of the plants which is harmful to human beings and animals also these are 18 families, 21 genera and 25 species, These plants having secondary metabolite present in the different parts of the plants such as root, stem, fruit, seeds, leaves. These plant parts contain poisonous plants for causing the various diseases to human and animals various diseases.

These plants having secondary metabolites such as alkaloids, flavonoids, glycosides, tannins, carbohydrates, phonols, flavonoids and anthocyanin, chlorogenic acid, snapic acid, stearic acid, steroids, anthraquinone, monoterpens, sequiternenes, aromadendrene, alpha-phellandrene, monoterpens, sequiternenes, aromadendrene, alpha-phellandrene, rhamnoside, chrysophanol, betasitosterol, pyrrolizidine they are synthesized by the plants. The main aim objective of this undertaken study is as follows to identify the poisonous plants of Poladpur area and create awareness among the people and school students, farmers and cattle of the grazers of this area, to make farmers and cattle grazers alert about harmful plants and to suggest them various remedies of protection of their family members and animals from these harmful and poisonous plants.To create awareness among the school students about poisonous plants and to offer them suggestion regarding required precaution to be taken by avoiding touch, smell and eating of poisonous parts of this harmful plants. To highlight the problems and seriousness of poisonous plants found in Poladpur area by writing article in local news paper and delivering lectures in the near areas.

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