

**Research Article**

**WEDELIA GLAUCA (ORTEGA) O. HOFMM EX HICKEN  
(ASTERACEAE): POISONOUS WEED FROM URUN-ISLAMPUR OF  
SANGLI DISTRICT OF MAHARASHTRA**

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**ABSTRACT**

*Wedelia glauca* (Ortega) O. Hofmm ex Hicken (Asteraceae), earlier known from Coimbatore, Tamil Nadu, South India & reported in the field of Sugarcane crop from Urun-Islampur of Walwa taluka of Sangli district of Maharashtra. It is poisonous crop weed again occurs in the field of Chili, Tomato and wheat crop. A detailed field observations, taxonomical description and illustration of species are provided here.

**Key Words:** *Wedelia Glauca, Asteraceae Maharashtra, Spreading in new areas of crops*

**INTRODUCTION**

*Wedelia glauca* (Ortega) O. Hofmm ex Hicken (Asteraceae), the species was native of Chile, South America and widely spread in Argentina, South Brazil and Uruguay. It is considered a poisonous weed and its toxicity is due to presence of hepatotoxic terpenoid, atractyloside. Further, it is commonly known as, Agricultural plague in Argentina. So far India is concern this species was firstly recorded from Tiruppur, Coimbatore, from Tamil Nadu of South India (Aloke Bhattacharya *et al.*, 1995) & also reported in the field of Sugarcane crop from Urun-Islampur of Walwa taluka of Sangli district of Maharashtra (Salunkhe *et al.*, 2002). Plant collection made during floristic survey of Walwa taluka in Sangli district of Maharashtra, author came across an interesting weed population of *Wedelia* not only in sugarcane crop but also occurs in the field of Chili, Tomato and Wheat crop from Urun-Islampur area, taluka place of Walwa near about 1.5 Km. from Islampur city. Its occurrence in above crops from Sangli district forms new distributional areas and spread in variety of crops and becomes naturalized in Maharashtra. It is recent introduction to this region, possibly through Cucumis or Tomato seeds. A detailed field observations, description and illustration are provided here to facilitate its easy identification for Botanist, veterinarians and Agriculturalist. Examined specimens deposited in the Herbarium, Department of Botany, K.R.P. Kanya Mahavidyalaya, Islampur, District Sangli.

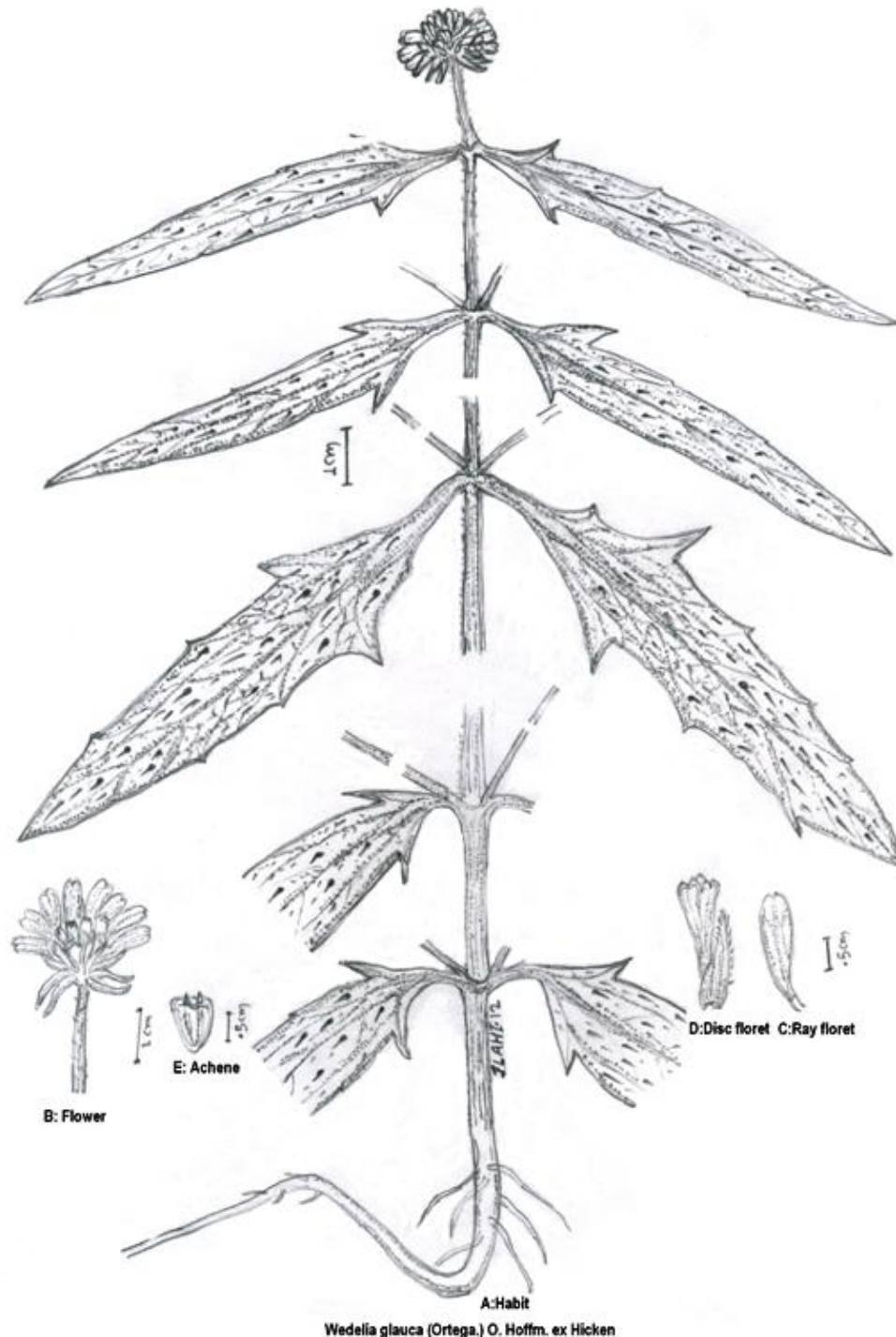
**MATERIALS AND METHODS**

The present study pertains to search and collect the weed from cultivated field. The observations and interviews were conducted and informations were collected from local farmers, farm laborers, & agriculturist about the weed. The field data was entered in the field note book. The specimen was identified and examined in the Laboratory with the aid of taxonomic literature and consulting with Dr. S.R. Yadav, Department of Botany, Shivaji University, Kolhapur for their correct identity. The collected and identified specimen was pressed and prepared into herbarium, following the drying method of Rao and Sharma, 1990. Specimen was deposited in the Herbarium of Department of Botany, K.R.P. Kanya Mahavidyalaya, Islampur, District Sangli.

**RESULTS AND DISCUSSIONS**

**Field Observations:** *Wedelia* is well growing as a weed in the various crops including sugarcane, Wheat, Tomato, Chili and Brinjal. It is spread nearly one and half square kilometer field area. It is considered as poisonous to domestic animals and human and showing toxic effect if it consumes the sheep, goat, cattle,

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and cows.

Intoxication by present weed, cattle and cows as well as grazing sheep and goat are found to be sudden death after eating. Generally, the foetus gets aborted a few hours after consumption even if it accidentally mixed with other forage. The growth and density of the crop plants becomes reduced, stunted in highly affected area. It is also found that, the total yield of crop is reduced & the fruit smell of tomato and brinjal are badly affected so market value is lower down. There is no anyone association of other weed in the field even the *Cynadon* is common weed in black soil in this region. The farmer and farm laborers also

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face the problem when inter cultivation during hand plugging and harvesting of crop they get suffers from headache and vomiting. There is significant observation is that vomiting, headache and causing dizziness in the farmers due to the smoke inhaled after burning of weed. The control of weed is difficult due to its rhizomatous deep stolons underground in soil. So farmers uprooted the weed and thrown on field bunds & burn out. There is no anyone chemical weedicide is so effective permanently, only aerial parts are response and after some days it started to grow again. Therefore, highly spreading of present weed adversely affects on the socio-economic status of farmers in this region.

### Taxonomic Treatment

**Wedelia glauca** (Ortega) O. Hoffm. Ex Hicken in Chloris Plantensis Argentina 2: 254 (comb. Nov.) 1910; Black, S. F. cont. Gray Herbarium Havrvad Univ. 52: 39, 1917; Black, J. M. fl. S. Australia ed.2, 4: 876. 1957; Strother, J.L. synonym. *Pasacalia glauca* Ortega. In Sys. Bot. Monographs 33: 40. 1991. Jeanes, J.A. in Walsh, N.G. & Entwisle, T.J. (Ed), nomen. syn. *Pasacalia glauca* in Fl. Victoria 4: 971, 973, fig. 199e. 1999.

*Flowering and Fruiting*: September to February.

*Habitat*: In cultivated field as a weed.

*Specimen examined*: India, Maharashtra Sangli district.

Urun-Islampur by Ilahi Mujawar. 720(1996); 980 (2000); 1610, (2010).

### DESCRIPTION

Annual or perennial stoloniferous herbs; about 18-30 cm. in height. Stem erect, glabrous, sparsely hirsute with longitudinal striations. Leaves simple, opposite, sessile about 8-11 cm. oblong-lanceolate, glabrous to scabrous with minutely hairs; hairs gland based apprising, base narrow with 2-3 or often 2 dentate teeth and acuminate apex, entire margin towards apex, slightly dentate at lower side. Flowers in pedunculate solitary, terminal or axillary heads; peduncle about 1.5-3 cm. long. Heads hemispherical to campanulate about 1-1.8 x .7-1.5 cm. Involucral bracts 2-3 seriate; inner is membranous and outer is leafy. Receptacle flat or convex, scales prominent. Ray florets carpellate with one row, fertile or sometimes sterile, ligulate. About .8-1.5 cm. long, limb elongate. Corolla yellow. Disc florets bisexual, tubular, 5-lobed. Anthers auriculata or truncate base, ovate or slightly acute apex and exserted. Style branched, filiform, hairy outside. Achenes about .4-.6 cm. obovoid, compressed, angled and glabrous, flattened in ray florets. Disc usually hairy, 4-angled, compressed and thick. Pappus short or lacerate scales with 2 minute awns, awns absent in ray florets.

### Conclusion

Present study pertains present status of poisonous weed & shown that it is badly affected on crop growth, yield and vegetable market. Present weed adversely affects on the socio-economic status of farmers in this region. It needs wide publicity and documentation for farmers veterinarians and agriculturist to find out the proper solution on weed eradication. Further, it is helpful for correct identification of weed.

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