

Short Communication

Spontaneous Tetraploid in *Bougainvillea* ‘Angus’ – A new report

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Abstract

The *Bougainvillea* variety ‘Angus’ was grown in the germplasm collection. Spontaneous mutation in the form of tetraploid was observed. The branch having tetraploid bracts was isolated and multiplied. Morphological characterization was done to document the morphological changes occurred. The tetraploid mutant was established as new cultivar.

Key words: Spontaneous, mutation, Tetraploid, Colchipoity

Spontaneous mutation has been reported in bougainvillea cultivars from time to time from various region of the world and it is well documented (Banerji & Roy, 2017; Banerji *et al.*, 2017; Zadoo *et al.*, 1975). Colchipoity is also reported in bougainvillea. Tetraploid has been induced in bougainvillea by the help of Colchicine treatment (Banerji, 2008, 2009, 2014, 2017, 2018). In the present investigation spontaneous Tetraploid has been observed. The present report deals with spontaneous Tetraploid in bougainvillea cultivar Angus.

One potted plant of Angus growing in a campus of Fujian Sheng Hong Zhan Landscape Engineering Company Ltd. China exhibited spontaneous Tetraploid branch. The branch was noticed on 24th July, 2019 during routine observation (Fig-1). The branch has bigger leaf size in comparison to the other branches. Enlarge leaf size and surface area along with bigger size of bracts drawn the attention. Significant difference in bract size was observed

(Fig-2). The increase in bract size is clearly visible from a distance, however bract and star colour remains the same in diploid and tetraploid branch (Fig.1). In both the cases bract colour is magenta and star colour is white. Bract textures in diploid bracts are soft while in Tetraploid bract its texture is leathery. Increase in bract size, shape, flower, tube length, tube and star diameter has been observed in Tetraploid Angus in comparison to normal diploid (Table-1).

The Tetraploid branch was labelled and allows growing further for its isolation and release as a new cultivar of bougainvillea (Fig-1). Significant increase in bract size was observed in tetraploid ‘Angus’ with leathery texture (Fig-2). It is more attractive than diploid cultivar of ‘Angus’. The new cultivar will be added in germplasm collection of the company for its further exploitation in Floriculture trade and landscape industry.

Table 1. Floral Characters of Diploid and Spontaneous Tetraploid Bougainvillea ‘Angus’

Characters	Angus	
	Diploid	Tetraoloid
Bract Size (cm)	Length	5.76
	Width	5.00
Bract Colour	Deep magenta	Deep magenta
Bract Shape	Medium Ovate	Broadly Ovate
Bract	Tip	Obtuse
	Base	Obtuse
Floral Tube Length (cm)	2.30	2.64
Floral Tube Diameter (cm)	0.30	0.66
Star Colour	White	White
Star Diameter (cm)	0.50	0.70

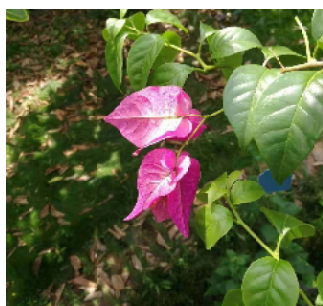


Fig. 1: Tetraploid Branch of ‘Angus’



Fig. 2: Bougainvillea Cultivar ‘Angus’

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