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DAHLIA

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1.0 Introduction

Dahlia is one of the most important garden plants. Multitude of colours, great variation in sizes (ranging from miniature, less than 2.5 cm across to giant over 40 cm in diameter), attractive shapes, many forms, profusion of flowering and easy cultivation have made them immensely popular. It was Abbe' Cavanilles who gave the genus the name *Dahlia* in 1791 (Smith, 1963).

As per Mexican Association of Dalia (AMD), the main growing states are Mexico City, Puebla and Mexico State. Since 2007, the National Day of Dahlia is celebrated in Mexico on each August 4th (Saar *et al.,* 2003). At present, there are 41 international associations concerned with the cultivation and spreading of dahlia; among them are the National Dahlia Society in the UK, the American Dahlia Society (ADS), other groups of New Zealand in European countries, France and Germany (Saar *et al.,* 2003).

2.0 Importance and Uses

2.1.0 Aesthetic Uses

Dahlia unquestionably occupies a place of pride in any garden anywhere. They are easy to grow both in ground and pot, and are extensively used for exhibition, garden display and home decoration. For exhibition and garden display all types of dahlias are used. Dwarf growing types are suitable for borders, beds or even in mixed borders. Large flowering dahlias in pots are popular for terrace garden or verandah display. The long-stemmed flowers of various forms and colour are used in flower arrangement. Cut flowers of pompon and miniature types stay fresh in flower vases for many days and also make moderately good garlands. Dahlia as potential crop in Cuban floriculture attributed to its perennial, busy growth habit, intense lilac petals and easier propagation by cuttings (Liudmila, 2015).

2.2.0 Therapeutic and other Uses

There are certain medicinal and nutritional uses of dahlia. Tubers of this plant contain significant amount of inulin and fructose and small quantities of medicinally active compounds, such as phytin and benzoic acid (Whitley, 1985). Nitsch (1992) reported that an inulin extract from tubers of dahlia is used in diagnosis of renal function. Legorreta *et al*. (2016) found that inulin extracted from wild species *Dahlia coccinea* was significantly better. Furthermore, cultivation of wild Dahlias significantly increased inulin and fructan contents of their roots. Tuberous roots of Merck Dahlia and 6 varieties of *D. variabilis* possessed 11.9-66.5 per cent inulin, 0.833-1.173 per cent tannins, 0.118-1.151 per cent essential oils, 0.190-0.213 per cent organic acids, 6.14-11.37 per cent and 0.20-0.24 per cent ascorbic acid. It could be used as an alternative source of Jerusalem artichoke inulin (Pupykina *et al.,* 2015).

Cruz-Alvarez *et al*. (2019) reported that tuberous roots of Dahlia wild species *viz., D. campanulata, D. coccinea* and *D. brevis* showed good nutraceutical and antioxidant properties which could be used as food as well as a source of selection of traits of nutraceutic interest for genetic improvement. Among the different wild species,

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