



## A New Records for *Nervilia aragoana* and *Nervilia plecata* of Valsad District– Gujarat State

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### Abstract

*Nervilia aragoana* and *Nervilia plecata* Belongs to Family Orchidaceae. It has earlier been reported by the Reddy (1987) but did not mention any note about distribution. The paper deal with indigenous taxa of Angiosperm belongs to Orchidaceae family is as an addition to Valsad District. The paper also envisages brief citation, detailed, description plant habit and tuberos followed by ecological notes along with photograph is also provided.

**Keywords:** *Nervilia aragoana* and *Nervilia plicata*, Valsad – Gujarat State.

### Introduction

Forest in India, from the ancient time, have played an important role in social, economic and religious activities. But it suffered a severe degradation in the last few decades due to ever increasing demand of goods and services. In view of the deteriorating forest resources and their importance to the national economy and environment, the Government has emphasized the sustainable development of forest resources, as well as conservation of eco-systems. The first national level planning exercise and the forestry sector took place two decades ago when the national commission of Agriculture (NCA) studied the situation in the country and made recommendations. But actions did not have the desired effect on the development of forestry. The Government revised its National Forest Policy in 1988 with the emphasis on conservation and environmental stability. Later on, the Government decided to undertake the preparation of a comprehensive action plan as National Forestry Action Programme (NFAP) with the aim of addressing the issues underlying the major problem of the forestry sector in line with the National Forest Policy, 1988.

### Study Area

There are almost 238 villages in Kaprada and Dharampur Taluka of Valsad district. The majority of the population depends upon the agriculture in the region. Warli, Kolchas, and koknas are the major three tribal communities found in the region. The climate of Dharampur and Kaprada area is humid to subhumid. Summer starts in March, rather early, and continues till Monsoon sets in during the second half of June. The highest temperature is around 105 degrees Fahrenheit in May and minimum in January down to 40 degrees Fahrenheit. More important than temperature is rainfall. Though the monsoon breaks in the second half of June and continues till September, nearly one half of the annual rainfall falls in the month of July. The major rivers and rivulets in the Taluka are Auranga, Mani, Tan, Par, Kolak, Damanganga. Exploitation of groundwater, through available in substantial measures, is both difficult and costly. Being formed of basaltic rocks with trap rocks generally occurring 30-40 feet below ground level and hard, massive rocks further below, irrigation through tube-wells is not viable.

The temperature ranges of both Taluka between 12°C minimum in winter to 42.8°C maximum in summer. Average rainfall ranges between 1000 to 3000 mm. Period of rainfall are from June to September and sometimes it extends up to October also. Total rainy days in a year are 40 to 45 days. There is Diversity inland region as this area consists of fertile land, forest area and some part are undulating with hills and hillocks. The forest is of moist deciduous forest type. Villages in Dharampur Taluka 114, Villages Kaprada Taluka 124, hence, 238 total Villages of DHARAMPUR AND KAPARADA Taluka are there in the forest ranges of Valsad district.

**Number of Plants:** 25.

#### **Plant Description**

##### *Nervilia aragoana*

Gaund in Freyc. Voy. Bot. 422, t.35.1829: Sant. & Kap. Orch. Bombay 134. 1966. Pogonia flabelliformis Lindl. Gen. Sp. Orchid. 415. 1840: Hook. f. op. cit: Cooke, Fl. Pres. Bombay 3:211.1958 (Repr. ed.). Nerviliacarinata (Roxb.) Schltr. in Bot. Jahrb. 1911. DUKKARKAND.

Tubers 1-5-2.0 cm in dia. subglobose, white. Leaf appearing after flowers, petiolate, 9-12 x 8-11 cm, cordate, broadly ovate to almost orbicular, acute, acuminate or apiculate, nerves up to 18 scapes 10-25 cm long, 2-sheathed. Racemes lax. Flowers drooping, green.

Shortly stalked, 2.0- 2.5 cm long. Capsules c 0.5 cm long, pendulous.

**Flowers & Fruits:** May – September.

**Distribution:** Peekhed and Mandva Village of Dharampur and Kaparada Taluka.

**Exsiccate:** D.D.P. 1800.

##### *Nervilia plicata*

(Andr.) Schltr. In Engl. Bot. Jahrb. 45;403.1911; Sant. & Kap. Orch. Bombay 137.1966. Arethusa plicata Andr. Bot. Reposit. 321.1802. Pogonia plicata (Andr.) Lindl. Gen. Sp. Orchid. 415. 1840; Hook. f. Fl. Brit. India 6:119.1890; Cooke, Fl. Pres. Bombay 3:211.1958 (Repr. ed.). P. biflora Wight. Ic. t.1758.1851; Hook. f. op. cit. Nervilia discolor (Bl.) Schltr. op. cit.; Sant. & Kap. op. cit. 131. DUKARKANTH.

Herbs, tuberous; tubers globose, 1-2 cm in diam., white. Leaves solitary, lying flat on ground, 4-16 x 5-16 cm, broadly ovate or suborbicular, obtuse-acute or shortly acuminate at apex, 13-nerved, purplish. Inflorescence obtuse of 2-3 flowered racemes. Capsules 1.0 - 1.6 x 0.6 - 0.8 cm, oblong, ribbed, winged along ribs.

**Flowers & Fruits:** May – August.

**Distribution:** Peekhed, Mandva and Khoba Village of Dharampur and Kaparada Taluka.

**Exsiccate:** D.D.P. 1804.



**Photograph 1:** Natural condition plant 2: *Nervilia aragoana* with tuber



**Image 2:** Plant of *Nervilia plicata*



**Photograph 3:** Natural condition plant of *Nervilia plicata*

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