

3. (3) *Z. secunda*,* (*n. sp.*) petiolis—, spinis—, pinnis—, spadicebus masculis sub-nutantibus spathis undique vestitis, spicis pedicellatis exsertis secundis, pedicellis spathis vaginantibus imbricatis, bracteis (spicarum) distinctis supremis et infimis vacuis.

HAB.—IN forests about Kujoo, Upper Assam. Mishmee Mountains on the lower ranges.

DESCR.†—*Spadices* about two feet long slightly curved, closely imbricated with the scarious, striate, split spathes. *Spikes* stalked, exserted; stalks nearly as long as the spathes, also covered with imbricating spathes, the uppermost of which resemble those of the flowers, except in not producing any villi. The spikes themselves are two-half and three inches long, scarcely half an inch in diameter, the bractæ both of the apex and base appearing to be empty.

Bractæ rounded distinct, on the outer side of each flower a tuft of hair.

Flowers densely crowded, so that their disposition is not at first apparent, the buds depressed at the apex.

Calyx tripartite to about the middle, scarious, striate, segments oblong, concave. *Corolla* (not seen expanded,) about the length of the calyx, divided not quite to the middle, the segments oblong, concave.

Stamina united to the petals, as high as the base of the segments.

Filaments (free) obsolete. *Anthers* oblong.

I have no information regarding the leaves, but the habit was noted to be that of *Z. edulis*.

This species in the character of the stalked spikes approaches to *Z. Blumeana*, Martius. Dr. Martius however states, that his plant has the spadix alternately and distichously branched, that the pedicels are from one to two inches long, furnished at the base with a *spathe*. The flowers

* Placed here provisionally.

† The specimens consist of male spadices before the opening of the flowers, and a spadix without flowers from the Mishmee Hills. This last has the spikes slenderer, often more exserted, and the villi more developed.

also are described as scarcely exerted, and the bracteæ as confluent at the base.

II.—*Flores polygamo-monoici, vel dioici, flori fæmineo flos neuter adjectus.*

4. (4) *Z. macrostachya*, (*n. sp.*) pinnis interrupte fasciculatis (fasciculis distantibus) lanceolato-spathulatis acuminatissimis infra medium setoso-serratis, spadicebus elongatis apice nutante humifusis, spathis distantibus, spicis (fæmineo-neutris) pedicellatis, ovario strigosissimo, fructibus irregulariter oblongo-ovatis cuspidato-rostratis hispidis.

HAB.—In marshy, exceedingly shady places, Ching near Malacca. *Rungum* of the Malays of Malacca.

DESCR.—Habit of *Z. edulis*, like which it forms tufted plants. It is, however, a stouter species. *Petioles* stout, for seven or eight feet above the base not bearing pinnæ, but more highly armed than usual with the characteristic spines, the larger of which are in oblique, nearly complete verticils. *Pinnæ* more interruptedly fasciculate, their direction (always curved or nutant) however, and shape are much the same; on the whole perhaps they are larger.

Spadices very long, so much so in fact as to reach the ground, on which, and often immersed in water, which abounds in the localities, the spikes of flowers will be found. *Peduncles* in the part not covered by the spathes covered with thick brown wool. *Spathes* of the usual nature, but much more distant; they are generally longer, except the lowermost, than the solitary amenta. *Spikes* three inches long, an inch nearly in diameter, stalked; the stalks of the lowermost very long, and all provided with smaller spathes. *Bracteæ* rounded, tinged with pink. *Bracteolæ* at least of the hermaphrodite flower, rounded, distinct, villosa-ciliate.

Flowers lilac-pink; in the axil of each bracte one large one female, and on one side of this a much smaller one, neuter. *Calyx* of the larger flower 3-partite to the middle, the segments oblong, concave, not very rigid. *Petals* united to their middle, (below which