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VI. Remarks on the Embryos of the White Water Lily (*Nymphaea alba*), and the Date Palm (*Phoenix dactylifera*)

Professor Dickson

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	Date of Flowering, 1870.	Date of Flowering, 1869.
<i>Orob. vernus</i> ,	April 3	Jan. 25
<i>Mandragora vernalis</i> ,	" 3	March 2
<i>Draba aizoides</i> ,	" 4	" 11
<i>Cydonia japonica</i> ,	" 4	Jan. 30
<i>Triteleia uniflora</i> ,	" 5	March 28
<i>Ribes sanguineum</i> —first flower seen open on standard plant, }	" 6	" 1
<i>Adonis vernalis</i> ,	" 8	" 18
<i>Muscari botryoides alba</i> ,	" 8	" 5
<i>Mahonia Aquifolium</i> ,	" 8	Jan. 30
<i>Hyoscyamus Scopolia</i> ,	" 9	" 19
<i>Omphalodes verna</i> ,	" 9	" 10
<i>Symphytum caucasicum</i> ,	" 10	" 10
<i>Hyoscyamus orientalis</i> ,	" 11	March 10
<i>Pulsatilla vernalis</i> ,	" 11	April 6
<i>Muscari racemosum</i> ,	" 12	March 25
<i>Anemone nemorosa</i> ,	" 12	April 3
<i>Pulmonaria virginica</i> ,	" 12	" 1
<i>Narcissus moschatus</i> ,	" 13	March 16
<i>Carex montana</i> ,	" 14	April 1
<i>Primula nivalis</i> ,	" 14	—

VI. *Remarks on the Embryos of the White Water Lily (Nymphæa alba), and the Date Palm (Phoenix dactylifera).* By Professor DICKSON.

Regarding the embryo of *Nymphæa*, Dr Dickson stated that he had nothing new to bring forward, and would merely exhibit preparations showing the different parts of the seed, viz., integuments, perisperm, endosperm (vitellus), and dicotyledonous embryo, with rudimentary radicle and well-developed plumule, exhibiting two leaves, an older and a younger one.

Regarding the embryo of the date, Dr Dickson remarked that, so far as he had seen, the representations of it in books were very erroneous—the slit of the cotyledon being indicated in one representation by a *transverse* cleft or fissure near its upper part, in another by a *longitudinal* slit near its upper part. Dr Dickson found that the slit of the cotyledon is longitudinal, and is always situated near its base. In shape the embryo is pretty definite, and may be described generally as conical. The cone, however, is

compressed laterally, and is somewhat curved towards its apex,—in fact, resembling a short somewhat flattened horn. The position of this conical body is definite as regards the mesial plane of the seed—its long axis being nearly horizontal, the compression lateral, and the curvature such that the concavity is towards the apex, the convexity towards the base of the seed. The position of the slit, however, is very variable. Though always longitudinal and situated near the base of the cotyledon, it may be either on the concave, on the convex, or on one of the lateral aspects. In fact, the slit may occur on any portion of the circumference near the base. This variability is noteworthy, since it would appear that the position of the cotyledon or cotyledons is, as a rule, constant as regards the mesial plane of the seed.* It is to be presumed that the condition in *Phoenix* depends on the developing embryo lying sometimes in one way, sometimes in another, in a cavity of a definite shape, which it ultimately fills and moulds itself to. It is, of course, to be understood that the embryo here is usually unsymmetrical, *i.e.*, its morphological mesial plane usually does not coincide with the mathematical mesial plane of the conical body. Dr Dickson hopes at a future period to extend his observations, and to publish some analyses of the embryo.

VII. *Miscellaneous Communications.*

1. Professor Balfour communicated a letter which he had received from Dr Gambleton Daunt, dated San Paulo, Brazil, 19th November 1869. Mr Daunt says—"I enclose you some seeds of the *Herva de Lagarto*, or Lizard plant, whose leaves the lizard (a large variety) masticates and eats during or after its combats with venomous snakes. The people of the country say that it is an antidote to all serpent poison; and a Saxon apothecary here avers, that when engaged in a natural history commission in the island of Santa Catharina, by order of the Dresden government, he was bitten by a serpent, and saved his life by swallowing the juice of the leaves of this plant, and applying the

* H ofmeister, Handbuch der Physiol. Botanik, Allgemeine Morphologie der Gewächse, pp. 620, 621.