ABNORMAL FLOWERS OF AMELANCHIER SPICATA.—Double flowers resulting from petalody of the stamens occur so often in the Rosaceae, that it is interesting to meet with a reversal of this state of things where the flowers have staminoid petals. Such an instance is afforded by the flowers of two small plants of *Amelanchier spicata*, Koeh., growing in the Royal Botanic Gardens, Kew. *Amelanchier spicata* is common in the Northern States of America, and is regarded by Sargent as a variety of *Amelanchier canadensis*. Like those of the latter, its petals are white, strap-shaped,

FIGS. 1-8.

or slightly obovate, varying in length from 8 to 12 mm. In the flowers of the plants growing at Kew the petals show a more or less complete infolding of their lateral margins. The more complete this infolding, the less the development of the petal-tip and the more nearly do the resulting structures resemble stamens. (Figs. 1-7 show a series of the abnormal petals.)

The most petal-like of the structures are of a white colour slightly tinged with pink; they are considerably smaller than normal petals. The most staminoid have white filaments bearing at their tips what appear to be anthers of a light brown colour, whilst the normal stamen has white filaments with cream-coloured versatile anthers (Fig. 8).

That the resemblance is not merely superficial is shown by transverse sections of these structures, as well as by the fact that the more completely developed of them undergo dehiscence disclosing yellow pollen-grains. Some sections were kindly prepared by Mr. Boodle, Keeper of the Jodrell Laboratory. Figs. 1 *a*, 3 *a*, 7 *a*, and 8 *a* show sections corresponding respectively to Figs. 1, 3, 7, and 8. In the first of these there is a development of the fibrous layer at one end only; in Figs. 3 *a* and 7 *a* this development

occurs at both ends. In Fig. 7 *a* pollen-sacs have completely developed and dehiscence has taken place, leaving disorganized cells and a few pollen-grains within the fibrous

FIGS. 1 *a*, 3 *a*, 7 *a*, and 8 *a*.

layer. It may be added that the flowers showed a further deviation from the normal in having the top of the ovary and the styles glabrous.

J. J. CLARK.

ROYAL BOTANIC GARDENS,
KEW.

ON WELL-MARKED AEROTROPIC GROWTHS OF BACILLUS MEGATHERIUM.—For nearly three years I have had under my observation aerotropic growths of *Bacillus megatherium* which present a remarkable annual periodicity. These growths were first noticed on the removal of some boards forming the front of a large box in which the palm *Demonorops* was growing. On the projecting dead extremities of the roots and the surrounding earth thus exposed, white fungal masses

Clark, J. J. 1912. "Abnormal flowers of *Amelanchier spicata*." *Annals of botany* 26, 948–949. <https://doi.org/10.1093/oxfordjournals.aob.a089426>.

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