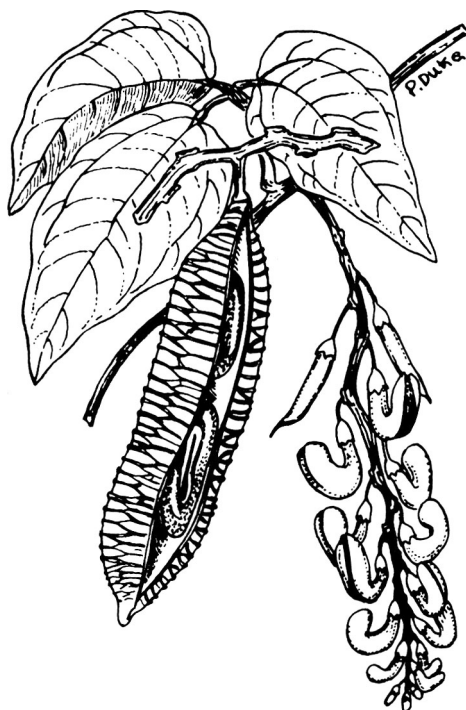


265. *PHYSOSTIGMA VENENOSUM* Balf. (FABACEAE) — Ordeal Bean

Lewis and Elvin-Lewis give an interesting account of Nigerian use of the plant to reveal and destroy witches and/or witchcraft. The suspect is given eight ground beans in water to drink. If guilty, his mouth shakes and mucus emanates from his nostrils, but if he is innocent, he lifts his hand and regurgitates. "If the poison continues to affect the suspect after he has established his innocence, he is given a concoction of excrement mixed in water that has been used to wash the external genitalia of a female. When a person dies from the ordeal the usual procedure is to remove the eyes and throw the body into the forest."<sup>11</sup> The leaves yield a dye used to stain gourds or wood black. Stems are split and made into mats. At one time physostigmine (eserine), which prolongs the effect of the transmission of nerve impulses to voluntary muscles by anticholinesterase action, was used to treat myasthenia gravis. Now it is more frequently used for the eye. More recently, Davis et al.,<sup>258</sup> noting that physostigmine improves long-term memory processes in humans, suggest further studies of the cholinomimetics in Alzheimer's disease. Bartus<sup>259</sup> has some comments on physostigmine that might fuel homeopathic flames. "The performance of the young monkeys treated with physostigmine was similar to that recently reported for young humans — no effects at low doses, some improvement at a restricted range of doses, and deficits at the highest dose." Getting variations with other age groups as well, Bartus concluded "physostigmine cannot easily or reliably be used as an agent for treating geriatric cognition."<sup>259</sup> Sometimes used as an antidote to atropine, curare, nicotine, and strychnine.<sup>17</sup>

Reported to be antidotal, myotic, parasiticidal, pediculicidal, raticidal, and sedative, the ordeal bean is a folk remedy for arthritis, bursitis, colic, diabetes, edema, fibrositis, glaucoma, myasthenia gravis, ophthalmia, psoriasis, rheumatism, spasms, tetanus.<sup>32</sup> Africans use the seed to kill mice and, with palm oil, to kill lice. Homeopaths use the drug for diabetes.<sup>33</sup>

Seeds contain 48% starch, 23% protein, and the alkaloids phystosterone (ereine), calabarine, eseranine, eseridine, physovenine, isophysostigmine, *N*-8-norphysostigmine.<sup>17</sup> Phy-