

factors; in addition, genetic make-up and different chromosome numbers (at different ploidy levels) directly influence the pollen grain size and density of ektexine spinules per unit area.

In our study of maize pollen, we found the various factors which influence the pollen grain size are directly or indirectly connected with the physiology of the plant. We will categorize these factors as (a) external and (b) internal. However, factors such as seed size are also important. The influence of this factor was tested using a popcorn type (chapelote). A number of the largest and smallest kernels were selected from a single cob; all kernels were considered genetically similar. After germination all seedlings were exposed to similar environmental conditions such as temperature, light, water and soil. At maturity the seedlings from the large kernels consistently produced large plants with large pollen grain size, while the seedlings from smaller kernels produced smaller plants and smaller pollen grains. It is also interesting to note that plants grown from smaller kernels flower a few days earlier than the plants grown from large kernels.

U. C. Banerjee
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8. Request to the readers of maize genetics cooperation News Letter.

Professor E. S. Barghoorn and U. C. Banerjee, of the Department of Biology, Harvard University, Cambridge, Mass., would like to request the readers of this News Letter to send dry mature pollen grains (at shedding stage) of pure inbred lines of sweet corn (with no gene for starchy character) and flour corn (with no gene for sugary character). They are also interested in receiving documented pollen grain samples of any primitive popcorn, pod-corn, teosinte or any other maize relatives.

They also request chlamydo-spores of smut from any maize relatives except corn-smut from maize.

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