The —SH and —S—S— values are listed in Tables 1 and 2. From these data the following conclusions may be drawn: (1) Significant amounts of —SH were found in all horny structures studied. (2) The rigid chemical distinction between hard and soft keratins on the basis of their sulfur content appears somewhat abitrary. Keratins form a series which contains transitional types. An example of such a transitional type is that found in the horse burr, heretofore considered a prototype of soft keratins. The horse burr is phylogenetically a rudimentary hoof, its keratinization differs histologically from epidermal keratin formation and chemically it resembles hard keratins by virtue of its horny layer having a higher disulfide content than its Malpighian layer. (3) The disulfide content of the Malpighian layer of the sole is in the same range as in the horny layer. This finding supports the theory that epidermal keratinization[3] starts in the depth of the Malpighian layer (*12*).

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[3] Differences between normal and pathologic human keratinization, confirming and extending Zingsheim's data (*13*) will be reported elsewhere.

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Isolation of *Histoplasma capsulatum* from the Air

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An epidemic of histoplasmosis in a farm family in Kansas following cleaning of an unused chicken house offered an excellent opportunity to sample the air for the presence of this organism. *Histoplasma capsulatum* had been isolated from the debris in the chicken house and from soil just outside. The infection had also been demonstrated in animals.

Another opportunity was provided in western Missouri when a soldier suffered an attack of severe pulmonary histoplasmosis after cleaning a chicken house.

TABLE 1.

Location	Date	Length of sampling time (hr)	Height of sampler opening from floor (ft)	Result
Atchison, Kansas	12–11–52	1.5	5	Neg.
	1–27–53	1.5	5	Neg.
	2–18–53	1.5	5	Neg.
	3–13–53	1.5	5	Neg.
	4–14–53	6.0*	2	Pos.
Beverly, Missouri	10–31–52	1.5	2	Neg.
	7– 8–53	9.0*	2	Neg.
	7– 8–53	4.5	5	Neg.
	7–17–53	8.0*	2	Pos.
	7–17–53	4.0	5	Pos.
	7–23–53	12.0†	2	Neg.
	7–29–53	13.5†	2	Pos.
	8– 6–53	9.0*	2	Pos.

* Combination of 2 simultaneous samples.
† Combination of 3 simultaneous samples.

H. capsulatum had been demonstrated in the debris in this chicken house also.

The atmosphere in these chicken houses was repeatedly sampled with portable Venturi scrubber air samplers (*1, 2*). The samplers were operated at 16 cfm. The plane of the Venturi opening was perpendicular to the ground. The debris on the floor of the chicken houses was not disturbed during the sampling period. The organisms in the distilled water in which the air was washed were collected by using the Goetz Millipore filter and injected into Swiss white mice. Sterile equipment and technique were employed throughout. Five of thirteen samples were shown to contain *H. capsulatum.* Details of the sampling are summarized in Table 1.

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Auxin-florigen Balance in Flowering of Soybean[1]

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Since Dostál and Hosek (*1*) first showed that flowering of plants could be delayed or prevented by growth hormone, or auxin, there has been an increasing feeling that auxin may be antagonistic to the postulated flowering hormone, or florigen. Bonner and Thurlow (*2*), Galston (*3*), and Leopold and Thimann (*4*) have observed tendencies toward flowering in plants held on noninductive photoperiods and treated

[1] Journal paper No. J-2383 of the Iowa Agricultural Experiment Station, project 1139.