EVIDENCE has been reported that the time of planting is important in the production of mealy potatoes. Findlay (2) states that early-planted, sprouted seed produced dry mealy potatoes, whereas late-planted, unsprouted seed of the same varieties produced very soggy tubers. Metzger (3) reported that the Russet Burbank variety planted between May 2 and May 25 produced tubers of better quality than those planted at later dates. Results which have been obtained in Michigan (4) indicate that early-planted seed produces better potatoes than that planted late.

It has been shown by Nash and Smith (7) that more mealy tubers are produced in light of high intensity than of lower intensity. Also, it has been stated by Cobb (1) that relatively low temperatures favor the production of mealy tubers. From a climatological standpoint, high light intensity and low temperature would not usually occur simultaneously during the growing season in New York State and thus would tend to oppose each other in the formation of high quality tubers at most times during the growing season. If the period of maturity is delayed until late September or early October, as is the case with New York grown Rurals, the length of the days is shorter, light intensity likely to be less, and the average temperature lower.

Nash (6) and Nash and Smith (7) have also pointed out that low light intensity and low temperatures may be important in the production of tubers which blacken after boiling. This being the case, one would expect that tubers which matured under conditions of high light intensity and high temperatures would blacken less than those produced under conditions of low light intensity and lower temperatures.

It has been pointed out by numerous investigators that immature tubers are lower in dry weight and less mealy than mature tubers. However, few, if any, results concerning the relation between maturity and specific gravity have been published.

Much has been published on the effect of fertilizers on quality; however, the evidence is so conflicting that little is known with much certainty concerning the effect of mineral nutrition on texture or color in potatoes. Certain investigators (5, 9) have stated that potassium is important in preventing blackening. The evidence with regard to the effect of potassium on texture is preponderantly in favor of the idea that potassium lowers specific gravity and mealiness. However, it is a question as to whether or not in most of these experiments the accompanying chloride was largely responsible. Equally good evi-