clearly that in order to increase our yield of potatoes, it is only necessary in digging our crop to expose the hills separately, and then before harvesting go through and select our seed potatoes from those hills which show the most abundant crop.

The experiment also seems to indicate that deterioration in a variety, whereby a good variety tends to become less and less profitable to grow, arises from the entire lack of selection from the point of view of the prolific plant, and that to obviate this deterioration it may only be necessary to yearly select our seed from the more prolific hills, instead of hap-hazard from the harvested crop.

The importance of this experiment perhaps justifies the massing of our conclusions in another table.

TABLE III.

	Lbs. per 100 hills Average.	
	Merch.	Total.
From largest tubers from most prolific hill	83	106
From largest tubers from least prolific hill	66	85
From smallest tubers from most prolific hill	69	88
From smallest tubers from least prolific hill	45	69

From this table it appears first, that the merchantable and the total yield from the seed taken from the most prolific hill, yielded in excess over the seed taken from the least prolific hill; second, that the yield of the largest tuber from the most prolific hill exceeded the yield of the largest tuber from the least productive hill; third, that the yield of the smallest tuber from the most prolific hill exceeded the yield of the smallest tuber taken from the least prolific hill; fourth, that the smallest tuber taken from the most prolific hill exceeded in yield the largest tuber taken from the least prolific hill; fifth, that the largest tubers from the most prolific and the least prolific hills yielded more crop than did the smallest tubers from the same hills.

These differences in yield appear more clearly if we arrange the figures obtained in the order of their magnitude without regard to variety, and this leads us to table 4.

TABLE IV.

Largest tubers from most productive hill. Lbs. yield.	Largest tubers from least productive hill. Lbs. yield.	Smallest tubers from most productive hill. Lbs. yield.	Smallest tubers from least productive hill. Lbs. yield.
138	123	119	91
130	116	105	79
123	88	102	79
106	86	86	73
103	83	84	72
103	73	79	69
92	72	78	61
86	62	72	55
71	62	70	52

The question may arise whether the smaller size of the cuttings from the smallest tubers may not account for the difference in yield. The smallest tubers from the most productive hills, however, did not exceed in size the smallest tubers taken from the least productive hills, and hence our results must be interpreted that the tubers from the most productive hills possess more inherent vigor than do those of the least productive hills.

While we can not regard a single experiment as in any sense conclusive, yet the evidence seems so clearly in favour of using for seed only tubers from the more productive hills of potatoes, that we think we can not err in commending this subject to the careful consideration of potato growers, and we would be very glad, this coming season, to have those who are interested in the subject make a trial according to this method, and experiment for themselves, and report the results, however they may result, to the public.—E. Lewis Sturtevant, *Director*.