The following is a response from René Featherstone, renowned ancient grain farmer, on why variations between einkorn grain from one crop to another:

"Before plant breeding of wheats began in the late 1800s, tens of thousands of *Triticum* landrace varieties established themselves naturally. This resulted in an immense diversity of how the plant appears in the field, as well as in post-harvest kernel appearance and milling/baking qualities.

In contrast to modern, bred cultivars which are genetically uniform, landrace varieties consist of two or more genotypes including subpopulations. Environmental and farm practice changes (as when landrace seed from location 'A' is planted in a different ecosystem 'B', which frequently happened as farming spread during and after the Neolithic) caused the percentages of the subpopulations to shift to where a new landrace specific to the new location developed, every time.

This, of course, is still the case today. If you planted seed of our Einkorn or Emmer landrace out in Iowa, in a mere four generations that Einkorn/Emmer would be rather different than ours in appearance and functionality.

This variability of landraces (which also entails differences from one harvest to the next) is actually the characteristic which makes choosing a landrace over a modern wheat the better way to go, because you're putting terroir (locality) into the mix. But it can also be confusing and challenging when you're used to the year-in, year-out uniformity of modern wheats.

The bottom line: Einkorn kernels can look and function along a very, very broad range.

As for the photos you sent. We don't know who your supplier is, but we assume it's Jovial Foods who have their Einkorn raised in Tuscany, Italy. We have visited the Italian corporation there; they told us that their first Einkorn seed was sourced from a grower in a northern part of Italy, who was growing this Einkorn traditionally. Over the centuries, it's likely that the local farmers there selected out larger-kernel genotypes and propagated them (to increase their yields of Einkorn livestock feed), which would account for the larger kernel size. As for the kernel plumpness, that's probably environmental because Tuscany has fertile soils on which the crops adapt to fairly high annual precipitation averages.

The photos also show the other Einkorn with a greenish tint (almost like Grünkern), we assume that must have been the lighting.

Freshness: any small grain must be at a minimum of 14 percent moisture to be stored without risk of mold; in the U.S. the standard is minimum 12 percent moisture. At that point the quality of the grain does not change but (if stored correctly) remains viable for about 16 years, according to the USDA. There is no difference in "freshness" whatsoever during that period.

Smell: the wetter the grain, the more obvious the smell, although the true aromas do not come out until milling or cooking. Our grains are often harvested at very low moisture because the Columbia Plateau is a very arid region.
The claim to fame of Lentz Einkorn Farro is that our growing conditions are very similar to the place where Einkorn originated, namely on Karaca Dag in Kurdistan which, like the Columbia Plateau, consists of volcanic soils in a semi-arid climate. We visited there and collected some of the wild Einkorn that still grows on the slopes; all the wild types we found have the characteristic flat shape of kernel as does our landrace. So, if you’re a purist, Lentz Einkorn is as close as you can get to the first Einkorn harvested 12,000 years ago near Gobekli Tepe!

Ultimately, your decision on which Einkorn to use should depend on the end product, be it bread or pasta or risotto. Ours has the look of authentic ancient einkorn, typically small and flat. Just as you wouldn’t judge a wine by the appearance of the grape, don’t judge a book by its cover, so to speak, but bake/cook the two Einkorn landraces side by side, using the same ingredients and recipe, and simply judge for yourself. Buy the one that pleases your palate best, and enjoy the most ancient grain of the _Triticum_ family of grasses.”