

Native Potatoes: Potential Markets Outside the Andes

For perhaps 8000 years, subsistence farmers in the Andes of Bolivia, Ecuador, and Peru have enjoyed native potatoes as their primary staple. These intensely flavored potatoes have colorful flesh and skin and a wide range of tastes and textures. Efforts to market bright yellow-fleshed cultivars indicate potential within the realm of fresh food and convenience markets as well as restaurants and other specialized users. The time may now be ripe to introduce Andean native potatoes to outside markets through the development of products such as native-potato chips (see cover photo) and french fries. Some consumers prefer native-potato french fries over conventional potato french fries, particularly those made from varieties with high dry matter and a bright yellow color.

Along with color and texture and large variation in firmness and mealiness, native potatoes have other appealing characteristics, such as their tendency to absorb lesser amounts of fat during frying. This quality is largely due to native potatoes' elevated dry-matter content, which can be as high as 34% of fresh weight. An additional benefit of native potatoes is that they contain various pigments (yellow carotenoids and red and purple anthocyanins) that not only produce a variety of colors, but are also nutritionally important as antioxidants.

Almost 4000 native potatoes have been collected and stored in CIP's gene banks. Current research and development efforts with native potatoes at CIP concentrate on identifying varieties that have consistently low reducing-sugar contents and that can be grown with minimal or no use of pesticides. CIP researchers also work with poor farmers in the Andes to preserve potato diversity in the field through on-farm conservation. Finally, CIP works with farmer organizations and entrepreneurs to identify native potatoes with the best potential for use in new postharvest opportunities and to develop novel products and identify markets for them. Our ultimate goal is alleviating rural poverty through value-added potato production.