Floragenex, a Eugene-based startup, is receiving an investment from a Midwest seed research and licensing company that will give the local firm the foundation to grow, its CEO, Nathan Lillegard, said.

Lillegard said he couldn’t disclose the size of the investment by Illinois Foundation Seeds Inc., but that it’s the first full round of outside investing the local company has received.

Floragenex develops and markets products that allow plant breeders to develop desired traits — without genetic modification — 10 times faster than traditional methods.

Lillegard said plant researchers try to breed plants that, for example, will offer better yields, disease resistance or other traits.

In the past, the only way to find out if the plants you are growing for seed have these desirable traits is to plant them, let them grow and then check the outcome. If the grower was looking for disease resistance, the process took even longer — the plant not only had to have the time to grow, but then it has to be inoculated with the disease and watched to see if it survived, he said.

With Floragenex’s technology, “we identify genetic markers that can be linked to specific traits, such as yield, disease resistance, growth, habitat,” Lillegard said.

“Instead of waiting for the plant to grow, as soon as the plant sticks its head out of the ground, you can take a sliver of the leaf and determine (by looking for the genetic marker) if it has the traits you want,” he said.
Large seed companies such as Monsanto have their own research divisions, but the technology they develop is proprietary, Lillegard said.

“We seek to make this fundamental technology revolution more accessible for all of global agriculture,” he said, “(putting it) within reach of any seed company, government agency or academic researcher working in plant sciences.”

The investment by Illinois Foundation Seeds, which works with a number of small seed companies and breeders, will allow Floragenex to add to its technology capabilities by increasing its lab capacities and acquiring more software, Lillegard said.

The Midwest company also will take a seat on Floragenex’s board.

“We are interested in investing in and supporting companies that want to stay independent and bring value to the seed industry,” Illinois Foundation Seeds CEO John Hiser said.

Floragenex, which was spun out of lab research at the University of Oregon, employs about six people but has an international customer base.

“It’s a big market, and it’s an exciting time,” Lillegard said.

“Agriculture is one of the things that’s critical to the survival and growth of the planet ... plants are slowly becoming more integral to everything from fuel to plastics.

“There are a lot of plant species that get used for many things, we’re really in the early stages for many of these,” he said. “We’re really just scratching the surface.”