IP IN AG INNOVATION SERIES

Intellectual property is the cornerstone of innovation. As global population grows, developing new technologies that can feed our world becomes more challenging. Intellectual property ensures that innovators can invest the resources necessary to create the next generation of farm technologies.

SOYBEAN

The soybean is a species of legume native to East Asia. Its growth has exploded in recent decades, firmly establishing soybeans as an essential global staple crop. Soy-based products such as tofu, soy sauce and vegetable oils can now be found in pantries and kitchens in every corner of the world.

Soybean Statistics

Skyrocketing Global Production

| YEAR | Amount (Million Tonnes) |
|------|-------------------------|
| 1961 | 26.9 |
| 1971 | 43.7 |
| 1981 | 88.5 |
| 1991 | 103.3 |
| 2001 | 178.2 |
| 2011 | 262.4 |
| | |

Top Soybean Producers



"Soybean crop is undoubtedly of a great economic and social importance worldwide."

- United Nations Food and Agriculture Organization

CHALLENGES & SOLUTIONS



Global losses each year from soybean pests is 25 to 29 percent and farmers lose one percent of their yield each day weeds are uncontrolled. Without good control, farmers will see their harvests and income rapidly decline. Herbicide-tolerant crops provide farmers with an essential tool for controlling weeds and limiting their losses. Developing these important varieties is difficult, though, and requires years of development. Intellectual property protections reward developers for their hard work and encourage them to continually reinvest resources in additional innovations to help soybean farmers.



Iron deficiency, or chlorosis, strikes soybeans around the world. The condition is observed first as a yellowing of leaves in the soy plant and results in damaged harvests and slashed incomes for farmers. However, researchers have developed productive varieties of soybeans that thrive in iron-deficient conditions, enabling a higher yield of crops in areas where this has traditionally been an issue. The developers of this breakthrough crop received intellectual property protections for their invention in recognition of the significant value it can contribute to the agriculture community.



Soybeans are highly susceptible to cyst nematodes, a plant parasite that devastates soybean plants worldwide and eliminates crops. The nematode infects the roots of the soybean, attacks the plant and reduces yields. Researchers are developing technologies that are being used successfully in development of cyst nematode resistant soybeans. As this is one of the most critical diseases facing soybean production, intellectual property protections are ensuring innovators can properly develop and deploy this crucial tool for tackling this rising threat.

Intellectual Property Makes Agricultural Solutions Possible

IP52.org Making sense of intellectual property

