

NEW ENERGY CROP VARIETIES FOR SOLID BIOFUEL PRODUCTION



Silver grass varieties

Areas of Application

The varieties are to be used in agriculture and energy sector for producing solid biofuels, cellulose, and well-balanced fodders (as by-products)



Phytoenergy variety

Specification

The plants are perennial crops (with a productive longevity of 10–20 years): sida, switch grass, sorghum, as well as silver grass and compass plant varieties. The plants are undemanding to soil, winter-hardy, and resistant to drought. The *Gulliver*, *Snihopad*, *Zoriane*, *Phytoenergy*, *NBS-75*, *Yuvileinyi-90*, *Bohatyr*, and *Columbo* varieties bred at the NBG have been recorded in the State Register of Plant Varieties of Ukraine.

Yield of raw material, t/ha	70–120
Yield of solid biofuel, t/ha	10–20
Energy production, Gcal/ha	70–120
Estimated cellulose production, t/ha	~10

IPR Protection

IPR3

Advantages

The varieties have no counterparts among the perennial crops in terms of productive longevity. As compared with the conventional crops they have a higher yield (by 20–40%) and profitability (by 80–150%); require minimum costs and power consumption

Stage of Development. Suggestions for Commercialization

IRL3, TRL3

The commercial use of varieties is governed by license agreements. Seeds and recommendations on plant cultivation and use are provided

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