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REPORT

on a European strategy for the promotion of protein crops – encouraging the production of protein and leguminous plants in the European agriculture sector (2017/2116(INI))

Committee on Agriculture and Rural Development

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MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on a European strategy for the promotion of protein crops – encouraging the production of protein and leguminous plants in the European agriculture sector (2017/2116(INI))

The European Parliament,

- having regard to its resolution of 8 March 2011 on ‘The EU protein deficit: what solution for a long-standing problem?’¹,
- having regard to the proposal for a regulation of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union (‘Omnibus regulation’) and the amendment thereto seeking to include a request to the Commission to publish a ‘protein plan’ by the end of 2018²,
- having regard to the European Soya Declaration submitted to the Agriculture Council on 12 June 2017 by Germany and Hungary and subsequently signed by 14 Member States³,
- having regard to Council Decision 93/355/EEC of 8 June 1993 concerning the conclusion of a Memorandum of understanding on certain oil seeds between the European Economic Community and the United States of America within the framework of the GATT⁴,
- having regard to the document adopted by the United Nations General Assembly on 25 September 2015 entitled ‘Transforming our world: the 2030 Agenda for Sustainable Development’, in particular Sustainable Development Goals (SDGs) 2, 12 and 15 included therein,
- having regard to the decision of the UN General Assembly at its 68th session to officially declare 2016 International Year of Pulses (IYP), under the auspices of the UN Food and Agriculture Organisation (FAO)⁵,
- having regard to its study entitled ‘The Environmental Role of Protein Crops in the new Common Agricultural Policy’⁶,

¹ OJ C 199E, 7.7.2012, p. 58.

² Report on the proposal for a regulation of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union and amending Regulation (EC) No 2012/2002, Regulations (EU) No 1296/2013, (EU) 1301/2013, (EU) No 1303/2013, EU No 1304/2013, (EU) No 1305/2013, (EU) No 1306/2013, (EU) No 1307/2013, (EU) No 1308/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, (EU) No 652/2014 of the European Parliament and of the Council and Decision No 541/2014/EU of the European Parliament and of the Council.

³ General Secretariat of the Council (OR. en) 10055/17, Brussels, 7 June 2017.

⁴ OJ L 147, 18.6.1993, p. 25.

⁵ Food and Agriculture Organisation of the United Nations (FAO), International Year of Pulses (IYP): Nutritious Seeds for a Sustainable Future.

⁶ IP/B/AGRI/IC/2012-067 (PE 495.856).

- having regard to the hearing held at Parliament on improving European plant protein supplies,
 - taking into consideration the Danube Soya Declaration of 19 January 2013,
 - having regard to Rule 52 of its Rules of Procedure,
 - having regard to the report of the Committee on Agriculture and Rural Development and the opinion of the Committee on the Environment, Public Health and Food Safety (A8-0121/2018),
- A. whereas the European Union is suffering from a major deficit in vegetable proteins due to the needs of its livestock sector, which is dependent on feed imports from third countries, a situation which has regrettably seen little improvement despite the many announcements of intentions and initiatives on this topic over more than 15 years, and despite the use of co-products from biofuel production in animal feed; whereas the EU's current situation, marked by the importation of vegetable proteins (mainly soya) from South America, is unsustainable and demonstrates that we should be taking more energetic action, notably to enhance the sustainability of these imports;
- B. whereas it is vital to reduce the Union's massive dependency on imports of protein crops, which are mainly used for animal feed; whereas in addition to the environmental impact in soya producing regions, the current situation carries major risks especially for the EU livestock sector, as price volatility on international markets has substantially increased;
- C. whereas Parliament has on a number of occasions spoken about proteins and the need for a European protein plan, but whereas its initiatives have not led to real effects likely to change Europe's dependence on others for its supply of vegetable proteins;
- D. whereas because of the outbreak of the BSE crisis a European ban was rightly imposed on the use of animal meal in feed¹, but this has had the effect of sharply increasing imports of soya from Latin America;
- E. whereas, consequently, the Union devotes only 3% of its arable land to protein crops and imports more than 75% of its vegetable protein supply, mainly from Brazil, Argentina and the United States;
- F. whereas livestock sectors in the Union are extremely sensitive to price volatility and distortion of competition and are dependent on imports of affordable and high quality vegetable protein, which poses a real challenge for European farms;
- G. whereas European protein crops generate oleaginous by-products which can contribute to the circular economy and be valuable for human consumption, renewable energy or the production of green chemicals; whereas the co-production of proteins and by-products in Europe makes it possible to reduce imports of both GMO proteins and biofuels which contribute to deforestation;

¹ Regulation (EC) No 999/2001.

- H. whereas the issue of vegetable protein used in animal feed has too often been analysed with a focus on protein-rich matter, linked to our deficit in vegetable proteins and to the search for raw materials to supplement farm animals' diets;
- I. whereas it is necessary to adopt a more comprehensive analysis of the vegetable protein issue in Europe so as to equip ourselves with a long-term strategy and maximise the number of instruments at our disposal for boosting the effectiveness of action to reduce our dependence on imported vegetable proteins; whereas this strategy is a tool in the transition towards more sustainable agri-food and farming systems;
- J. whereas proteins, like energy, are an essential component of our food and can be provided in plant or animal form;
- K. whereas vegetable proteins are at the core of the challenges of food security and sovereignty (for food and feed), environmental protection, global warming and renewable energy; whereas they are essential to life and are present in all foods consumed by both humans and animals;
- L. whereas the total European production of protein-rich matter rose from 24.2 to 36.3 million tonnes (+50 %) between 1994 and 2014, but at the same time consumption increased from 39.7 million tonnes to 57.1 million tonnes (+44 %); whereas the Union's overall protein deficit (20.8 tonnes in 2014) is therefore increasing; whereas the world market in vegetable proteins, connected with the market in soya and soya meal, has grown considerably over the past 50 years, and whereas consumption of these raw materials has surged in all Member States, with soya consumption rising from 2.42 million tonnes in 1960 to almost 36 million tonnes today; whereas the EU livestock sector is heavily dependent on imports of soya beans and meal from third countries, especially from South America; whereas demand for soya within the EU uses an area of almost 15 million ha, 13 million ha of which are in South America;
- M. whereas the cultivation of protein crops generates a significant added value for the environment, which is not endangered by the related use of plant protection products;
- N. whereas in recent years China has become the world's largest importer of soya and has launched its own genuine and non-transparent security of supply strategy, located outside traditional market mechanisms and based on production contracts with the world's largest soya supplier, Brazil, and massive investment there, at the expense of the environment, in production, processing (crushing) and port transport infrastructure; whereas this internationalisation strategy on the part of the Chinese agri-food industry could impact the current soya and oilseed market supplies of the EU, which is also a major customer of Brazil, and endanger the stability of the markets of the Union;
- O. whereas the majority of soya imported, in particular from the Americas, is from genetically modified crops, and whereas European consumers distrust this technology; whereas there is growing interest in local non-GMO products and increasing concern about the carbon footprint of imports; whereas within the EU many soya bean producers and processors, animal feed producers, and representatives of the food industry (meat producers, milk and egg producers and other users of soybeans), trade chains and other relevant institutions support sustainable, certified GMO-free systems of soya bean production;

- P. whereas to meet the EU's food needs, European agriculture has undergone a transformation, under the common agricultural policy (CAP); whereas it has intensified and agricultural produce and raw material markets have opened up, which has increased the EU's dependence on imports of vegetable proteins from the Americas; whereas globalisation has brought a convergence of dietary habits and farm specialisation, giving rise to large-scale movements of inputs over long distances for the production of proteins, whether synthetic nitrogen fertilisers or protein-rich raw materials for livestock feed, with an impact on the environment and the climate;
- Q. whereas the production of protein crops, particularly soya, imported for the production of animal feed is one of the key drivers of land use change and is a major driver of global deforestation in many regions outside Europe; whereas increased cultivation of European protein crops could provide an important complement to measures to promote agricultural commodity supply chains without deforestation; whereas addressing the global challenge of deforestation and forest degradation has become even more important in the light of the 2030 Sustainable Development Agenda and the Paris Agreement on climate change;
- R. whereas the nitrogen needed to feed plants and manufacture vegetable proteins, with the exception of leguminous crops, is today mainly provided by synthetic nitrogenous fertilisers, which are costly and energy-intensive to produce, generate pollution of both water and air resources and have a high ecological footprint due to the large amounts of fossil fuels consumed during the production process; whereas this does not contribute to the goal of the circular economy and making more efficient use of our resources and waste streams; whereas in these circumstances, the question of proteins needs to be rethought, from production right through to consumption, in terms of productive and environmental performance, based on more satisfactory management of the nitrogen cycle, including the use and development of organic nitrogen fertilisers such as recycled nutrients from organic waste streams like animal manure;
- S. whereas in order to reduce the EU's dependency on imports of vegetable proteins, it is necessary to focus not only on protein-rich crops which address the needs of ruminants and non-ruminants, but also on all other crops (including in forage and grassland areas) which, while they have a lesser protein content, are extensively cultivated throughout the Union; whereas there are many benefits to pasture-based grazing for ruminants, including reduced farm input costs;
- T. whereas there will not be any increase in vegetable protein production without improvement of the profitability of such plants and there is a need today for the implementation of a strategic, effective and ambitious vegetable protein supply plan to support the sustainable development of European agriculture; whereas such a plan requires the mobilisation of several EU policies, first and foremost the CAP;
- U. whereas in recent decades the Union has used three main levers to support the objective of European protein independence, namely voluntary coupled aid for protein and oilseed crops, EU biofuels policy and the conditionality of 30 % of direct support introduced by the last reform of the CAP in relation to the implementation of greening measures, including the obligation to devote 5 % of arable land to ecological focus areas (EFAs) and the decision to allow nitrogen-fixing crops and catch crops;

- V. whereas the interest of farmers in nitrogen-fixing and protein-rich crops has increased significantly because they help farmers to meet requirements under the greening policy, and whereas this interest will encourage plant breeders to resume or increase their activities related to these crops;
- W. whereas over the period 2000-2013 the measures introduced by the CAP did not by themselves succeed in reversing the declining trend or stagnation of protein production in Europe, but whereas since 2013 the combination of such support together with the greening measure authorising the cultivation of protein crops in EFAs has led to a sharp increase in the production of protein crops in the EU;
- X. whereas the political agreement on the CAP reached by Parliament, the Council and the Commission in 2013 envisages the possibility of growing nitrogen-fixing crops on EFAs;
- Y. whereas research has shown that feed manufacturers often add more protein to food than is considered necessary and whereas efficiency gains can be made by means of more precise determination of the protein content required by the target species;
- Z. whereas owing to the small share of protein crop cultivation in the EU, the number of vegetable protein research programmes is falling, matched by a decline in training, innovation and the acquisition of practical experience in the EU; whereas the effectiveness of innovation should be enhanced and protein research policy stepped up, but whereas this would only succeed if backed by medium- to long-term political commitments; whereas protein research policy should also include locally adapted home grown leguminous crops;
- AA. whereas supporting plant breeding activities will be important for the development of new varieties of protein crops that can contribute to higher EU protein production; whereas effective plant breeding activities require a sufficiently funded long-term research policy and a suitable regulatory environment that encourages innovation;
- AB. whereas the Commission has already funded, and is in the process of funding, a number of relevant projects, including those under the heading ‘SFS-44-2016 – A joint plant breeding programme to decrease the EU's and China's dependency on protein imports’; whereas appropriate communication, dissemination and exploitation of the results of such projects should be ensured so that future policy decisions in this field are based on evidence;
- AC. whereas the cost of soya has roughly doubled in real-terms since 2007;
1. Takes the view that it is time to implement a major strategic European vegetable protein production and supply plan based on the sustainable development of all the crops grown throughout the EU; further takes the view that this change implies a substantial alteration of our production systems to meet the livelihood requirements of farmers and the requirements of the circular economy and sustainable farming production, based on principles such as agroecology and other environmentally-friendly practices, including low-input ruminant feeding strategies based on both permanent pasture and temporary grasslands on arable land;

2. Calls on the Commission to take immediate actions aimed at avoiding any reduction in the current production level of protein crops, taking into due account the environmental benefits deriving from the conventional cultivation of nitrogen-fixing crops in EFAs;
3. Observes that protein crops can be beneficial for the environment due to their potential to fix nitrogen from the atmosphere; adds that these benefits include reducing use of fossil fuel-based fertilisers, improving soil quality and fertility, and in rotation, reducing disease levels from continuous monocropping and protecting and enhancing biodiversity; emphasises, moreover, that biological nitrogen fixing by these crops can help to reduce input costs and the possible negative environmental effects associated with the overuse of fertilisers;
4. Calls for the establishment of a European platform, supported by the European Crops Market Observatory making it possible to: identify European protein cultivation areas by crop category and location, create technical references that are accessible to all farmers, determine European protein production capacities in order to facilitate marketing and catalogue all public- and private-sector research carried out into proteins;
5. Recommends focusing on all vegetable protein sources, thus on crops used both in food and feed, and on regulatory support for the development and marketing of new plant-based proteins; believes, moreover, that more research should be carried out into alternative protein sources;
6. Acknowledges that soya production in South America is a major factor in land-use change and causes multiple ecological problems such as the pesticide contamination of groundwater, soil erosion, water depletion and deforestation leading to a devastating loss of biodiversity; recognises that soya production has negative social and health consequences in producer countries, aggravated by weak land tenure rights, land grabbing, forced expulsion and other human rights abuses;
7. Recalls that the BSE crisis in the 1990s and the ban on using processed animal proteins in animal feed, as established in Regulation (EC) No 999/2001, has increased demand for plant-based protein in Europe; notes that alternative European protein feed sources, such as fishmeal, are used in the European fish farming sector;

The multiple objectives of the plan

8. Takes the view that this plan must maximise sustainable biomass production in relevant agricultural areas by developing permanent plant cover, some of which can be devoted to protein supply;
9. Considers it necessary to look in particular at the potential of leguminous crops, whether grain or forage legumes, as this family of plants presents several agricultural, economic and environmental benefits, their key advantages being that they fix nitrogen from the air by means of a symbiotic system, which reduces the need for synthetic nitrogenous fertilisers, and require very little pesticide use; emphasises that leguminous crops leave behind a good soil structure for the next crop thanks to their legacy of nitrogen, which can increase yields by between 10 and 20 %; points out that rotation benefits soil quality, reduces disease levels and supports biodiversity;

10. Highlights in addition that in crop rotation systems including leguminous crops, the reproductive cycles of pests and pathogens are interrupted, thus reducing plant disease levels and the need to apply pesticides; notes that an additional benefit is that biodiversity is also increased by breaking up year-on-year monocultures;
11. Recommends supporting, in particular under the CAP, the cultivation of soya in the EU by making it profitable and competitive, as new varieties are currently opening up fresh possibilities for some regions where the crop can adapt, but notes that this should not overshadow the cultivation of other grain protein crops (lupins, faba beans, peas, chickpeas, peanuts, broad beans etc.); believes this wide variety would make it possible to maximise protein production in all regions of Europe, depending on local climatic conditions;
12. Calls for greater attention to be paid to the management of grassland and clover crops which, given the extensive areas they occupy, make a major contribution to meeting protein needs for animal feed (only ruminants); notes that leguminous crops like clover can progress well in grassland;
13. Recommends that vegetable protein crops such as soya, alfalfa, broad beans, peas and crops such as clover, sainfoin and many other legumes be reintroduced into large-scale cultivation and forage systems;
14. Sees the need to develop local and regional protein production and processing chains by establishing groups of farmers and by creating closer links between arable crop farmers and livestock farmers (supply and exchange contracts, building of decentralised small to medium-sized 'green protein' bio-refining plants), to exchange knowledge on suitable legume varieties, rotations and soils; deems it useful, to that end, to assist, via the CAP, operators taking risks by entering short supply chains for protein-based food and feed; highlights the importance of direct contracts between growers and animal feed producers;
15. Encourages the promotion of the production of high quality varieties of GMO-free vegetable proteins with clear traceability and labelling (with regard to both their place of production and the methods used), in response to the increasing interest of European consumers in GMO-free products;
16. Considers it necessary to support greater self-sufficiency of farms in animal feed at both farm and regional level and for ruminants as well as for monogastric animals, including through on-farm feed production;
17. Considers it desirable to minimise harvest losses and residual streams and increase nutritional value by improving harvesting, storage and processing systems (drying, wrapping, etc.);
18. Takes the view that in order to enhance vegetable protein production it is necessary to increase the profitability of these crops and to develop practices such as crop rotation (over a minimum of three years) and under-sowing for leguminous crops, and increase the mixing of varieties and crops in the pulse (clover/rape, triticale/peas etc.) and forage (grass, clovers, meslins, etc.) production sectors, in order to shift towards a more

sustainable agri-food system, supporting a shift from input-intensive crop monocultures within and outside the EU towards a diversified agroecological system;

19. Calls for research work to begin on: suitability for use in rotations and mixed cropping; selection of new varieties and species that give flexibility to farmers to adapt to climate change; resilience to stress; crop mixing; improvement of yields; protein content and digestibility of animal feed (sprouted seeds, rapeseed etc.); increasing resistance of plants to diseases; the germination biology of weeds as a function of weed control; feed conversion; and biostimulants; highlights the need for farmers to have a coherent toolbox including management practices, techniques and plant protection products to combat pests and other factors that may negatively impact crop yield and growth;
20. Calls for heavy investment in research including varietal research to improve the agronomic performance of these crops, make protein crops economically attractive, since they may suffer by comparison with the margins obtainable from other crops, deliver more crop varieties, in order to secure yields, solve the agronomic issues that are limiting protein crop cultivation and ensure that volume is sufficient, this being essential for structuring production and distribution chains; highlights that it is also necessary to develop protein crops that are more adapted to the European climate, improve their protein value and to ensure security for investments in order to foster research;
21. Recommends greater use of precision agriculture, in particular via digitalisation, in order to adjust plant inputs and animal feed rations as accurately as possible, so as to limit waste and some types of pollution, and also recommends making greater use of mechanical weed control systems;
22. Intends to promote: the acquisition of new knowledge; knowledge transfer; basic and continued training; and support for all other types of applied innovation and research into both human food and animal feed;
23. Calls for support to be given to all forms of innovation and applied research by pooling experience and knowledge and by drawing in particular on local stakeholders offering innovative solutions;
24. Calls for sustainability criteria for feed imports in order to ensure a sustainable production of protein plants in third countries which does not lead to negative environmental or social impacts;
25. Highlights the important role that dietary education can play in shaping food demands; stresses the need for the adoption of dietary guidelines at either EU or Member State level aimed at promoting a healthy diet while addressing the environmental concerns linked to food production;
26. Regards it as essential to step up technical support for farmers and advisory services with a view to promoting the sustainable production of grain and forage protein;

Instruments of the plan

27. Takes the view that this plan calls for the mobilisation and coordination of several EU policies: the CAP; research policy; environmental and climate action policies; energy policy; the neighbourhood policy and trade policy;
28. Considers it important for the CAP to support protein crop cultivation by means of different measures such as the voluntary coupled payment – which should not be restricted to crops and regions, in difficulty in order to give scope for more action – and the greening payment, and by means of the second pillar, particularly through agro-environmental measures on organic and other types of farming, investment quality, the Farm Advisory System (FAS), training and of course innovation via the EIP; highlights the fact that the introduction of a coupled payment has driven protein crop production in some Member States;
29. Believes that useful lessons should be learnt from the recent ban on the use of pesticides in EFAs, even though, in 2016, they accounted for 15 % of Europe's arable land (eight million hectares) and almost 40 % of these areas are used for nitrogen-fixing or catch crops; takes the view that as part of the process of making use of all usable agricultural areas, provided for under the vegetable protein autonomy plan, EFAs may be used for protein production both within conventional farming – with integrated pest management, taking into account the fact that farmers growing these crops in EFAs in conventional agriculture do not always have the assurance of being able to react to pest invasions – and organic farming, given that in order to replace soya imports into the EU, the equivalent of nearly 17 million hectares would have to be under soya in the EU; considers that ecological focus areas are furthermore essential for boosting biodiversity, which is under threat, and for our food security, since, in particular by improving pollination, biodiversity can increase the yields of neighbouring crops, which may be protein crops, by some 20 %;
30. Recommends an adjustment to greening arrangements in connection with maintaining permanent grassland in order to take account more effectively, in particular regions, of the specific characteristics of alfalfa, either alone or in grass mixes, on temporary grassland that is more than five years old, that time span limit meaning that the grassland concerned will be classified as permanent, as defined in law, thus restricting ploughing up after the five-year period, even though replanting would enable a large volume of feed protein to be produced with greater protein autonomy for the holdings concerned;
31. Welcomes the fact that, in the context of the omnibus revision of the common agricultural policy, Parliament obtained a revaluation of the conversion coefficient for nitrogen-fixing crops from 0.7 to 1 in compensation for the ban on the use of pesticides in EFAs;
32. Is of the opinion that a European protein strategy should take into account the recast of the Renewable Energy Directive, the dual use of proteins and the role of their by-products, wastes and residues in the circular economy, and encourage crop rotation and diversification and the utilisation of fallow land in accordance with greening measures under the CAP;
33. Considers it important that the future CAP take account of additional proposals to support the cultivation of vegetable proteins, such as proposals for three-year-minimum

rotation systems on arable land to have a leguminous component; in that regard, highlights that Member States where wet weather diseases are prominent may need a longer rotational period; also considers it particularly relevant to create an ecosystem payment that is more flexible than the greening payment so as to recognise the benefits of leguminous and oilseed crops for biodiversity, including for the feeding of pollinators, provide risk-taking mechanisms for innovators and open up a proteins sub-priority in the rural development policy;

34. Stresses the need to introduce new instruments to help increase the supply of plant proteins, in particular soya, and to ensure equitable implementation across all the Member States;
35. Believes that the current research in the field of a strategy for protein crops is fragmented and lacks focus; calls for research and development efforts, particularly public research, to be stepped up into under-developed protein crops suitable for both human food and animal feed which are of little or no interest to private investors, and alternative proteins such as insect protein and algae; calls for greater cooperation between public and private research institutions; underlines the need for a regulatory framework that supports research and innovation programmes in order to achieve increased and competitive protein production;
36. Recommends increased investment in industrial and agricultural research projects that focus on boosting the quality and diversity of functional proteins for human consumption;
37. Takes the view that it is necessary to secure our autonomy in soya supplies by cooperating more closely with our neighbourhood, and to diversify the sourcing sustainability of non-EU-produced proteins, notably from the EU's neighbours which have opted for Europe and which produce soya that could be brought into the EU via the Danube; calls for those imports to meet the same social and environmental standards as apply to intra-EU production and admits that GMO-free soya cultivation is welcomed to meet consumers' demands;
38. Recognises that today's agricultural practices are unthinkable without soya, that this highly important legume had, in the recent past, almost vanished from European cultivation, and that soya cultivation rose from 17 million tonnes in 1960 to 319 million tonnes in 2015;
39. Calls for adjustments to the second pillar of the CAP to provide better recognition of and remuneration for the contribution of crops that feed pollinators at critical times of the season (early flowering plants in spring) and their role in fighting pollinator decline;
40. Supports the establishment of transparent product labelling systems based on certified production standards, such as the Danube Soya and Europe Soya standards;
41. Takes the view that although the 1992 Blair House Agreement is still in force, it is de facto obsolete and should not hamper the sustainable development of protein crop growing in Europe;

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42. Instructs its President to forward this resolution to the Council and the Commission.

EXPLANATORY STATEMENT

I. BACKGROUND

Over the last 15 years, Parliament has on a number of occasions spoken about proteins and the need for a European protein plan. Unfortunately, these initiatives have never been followed up and the European Union continues to depend on others for its supply of protein crops. This would appear to be a more propitious moment to re-examine the issue, given that the EP, Council and Commission have now included it on their agendas, as evidenced by the Council's 'soya declaration' of June this year and the Commission's announcement regarding Commissioner Hogan's European 'protein strategy'.

In the past, protein for animal feed was considered solely in terms of the need for high-protein commodities and efforts to offset our protein crop shortfall, principally by means of soya imports. In adopting a new approach to the question of proteins in Europe, it is also important to remember their importance in the human food chain.

In fact, matters are even more complex. Protein supply is a central issue, lying at the heart of the two key concerns that require our immediate attention, relating to food safety on the one hand and environmental and climatic challenges on the other.

1. Protein supply a central issue lying at the heart of two key concerns

(a) Food safety

Imported protein crops are necessary to meet the needs of livestock.

The world markets in protein and soya meal have undergone significant changes in recent years, with possible tensions now on the horizon in view of the very large quantities of protein being consumed in some parts of the world, especially in the form of meat.

For over 50 years, soya consumption has been rapidly increasing in farming countries, accounting for 45 % of the world protein market. In Europe, it has risen from 2.42 million tonnes in 1960 to almost 36 million tonnes today. Elsewhere and in China especially, domestic consumption has gone through the roof. China is now the world's largest importer of soya, mainly from Brazil, the world's largest producer and exporter. Particular attention must be drawn to one important fact. China, which absorbs over two-thirds of soya produced in Brazil, has found a way of securing its future supply that could well jeopardize our own and that of other soya purchasers.

As a result we could soon find ourselves paying well over the odds, assuming that we are still able to obtain sufficient supplies of soya, or indeed any at all.

(b) Environmental concerns

Use of synthetic fertilisers containing nitrogen to grow protein crops also has a pollutant ecological cascade effect, contaminating water supplies and causing greenhouse gas

emissions. It is necessary to rethink fundamentally the sustainability of our food production and farming systems if the nitrogen life-cycle is to be managed more satisfactorily.

The question of protein supply clearly raises a number of issues regarding the development of our agri-food models. Mere adjustments to demand for high-protein crop commodity imports and the mass production of synthetic nitrogen fertiliser will not meet our requirements in terms of food supply and could indeed lead to local imbalances and international tensions. We need to consider seriously a new approach with a view to ensuring a sustainable agri-food sector that takes full account of protein, leaving the greatest possible room for manoeuvre and action to reduce our protein crop dependence.

2. It is necessary to consider all sources of protein

(a) Unbalanced protein supply for animal feed

Each year, 477 million tonnes of raw materials are used for animal feed production, around 50 % of which are obtained from on-farm grassland and fodder production, the remainder coming from mainstream arable crops and imports.

Demand for protein crops, excluding fodder, is around 45 million tonnes of crude protein annually. 60% of demand is met by meal co-production and 40% by cereal and oil-protein crops.

The Union is currently able to produce of 38 % of its animal feed protein requirements. For soya cake, which accounts for around one-third of protein supply, the figure is 5%, which is particularly low.

(b) Potential sources of supply

In order to reduce dependence on outside suppliers, it is necessary to focus on not only protein-rich crops but also those with a lesser protein content that are extensively cultivated throughout the Union. By casting our nets more widely to include all protein sources, we could draw all regions of Europe together in a joint effort to achieve sustainable development and reduce our protein dependency.

To this end, the Union has a very wide variety of crops and varieties to choose from, including grain legumes, such as oilseeds (rape, sunflower and soya) and protein crops (peas, chickpeas, beans, lupins and field beans).

In recent years, the quantities of rapeseed meal produced have risen significantly due to the development of agri-fuels. While soya production has remained relatively modest, it could be stimulated by focusing on more suitable varieties that produce better yields and are more economically competitive compared with cereals.

In this connection, foodstuffs (such as milk and tofu) could also be a source of added value. Other seed crops, such as protein peas, field beans, lupins and chickpeas, must not be neglected, especially if new varieties and new ways of combating bio-pathogens can be developed thanks to research in this area. Less attention has been given to forage legumes, which can nevertheless, as sole crops or intercrops, play a role in reducing dependency in the

livestock sector and improving farming practices. Finally, improved cereal quality should also figure as an asset on the protein balance sheet.

II. A BROAD AND AMBITIOUS STRATEGIC PLAN FOR THE SUSTAINABLE DEVELOPMENT OF PROTEIN CROPS IN EUROPE

EU policies relating to proteins should be mobilised and coordinated in support of this plan.

(a) CAP

Under present circumstances

Direct support for protein production under the first pillar would appear to be a good solution with a view to implementing the protein plan throughout the Union.

Various greening projects could benefit from protein production, including crop diversification, organic farming, and certification schemes, all of which encourage a system of crop rotation that favours protein crops. Ecologically significant areas could also be used for protein production without the need for systematic recourse to pesticides.

Given the number of countries that have used it, voluntary coupled payments appear to be most appropriate tool for protein crop development and could be used more extensively rather than being limited to sectors and regions in difficulty.

The rural development pillar offers a range of assistance for the development of proteins, including agri-environmental measures, on-farm investment in production and processing, quality enhancement, advice, training, innovation and measures to encourage organic farming.

As part of CAP adjustment or reform

We would suggest a number of adjustments to existing tools. For the greening payment, a rotation requirement (three-year minimum) could be a useful addition to diversification. This would have a number of major agronomic and environmental benefits (more effective pest containment, better soil quality etc.).

Crop combinations could also be considered. Coupled payments should no longer be limited to sectors and regions in difficulty when used to support protein crops and should be made more flexible to facilitate the use of the available funding.

Other possibilities as part of CAP reform could include: first-pillar ecosystem support for legume crops and specific risk-taking support for the launching of protein chains. This could also be combined with ERDF funding.

(b) Research policy.

The EU has never displayed much interest in long-term research projects seeking ways of reducing our protein crop dependency. Public research investment is very important for less commonly cultivated crops that are of little or no interest to the private sector.

(c) Neighbourhood policy

In certain of the EU's neighbours such as Ukraine, largely based on farming, production and climatic conditions are favourable to soya, which is already being grown there. Protein production in cooperation with Ukraine, which is currently at odds with Russia while favouring Europe, would be a sensible course of action, given that we are already importing tonnes of cereals from this country competing with that produced by our own farmers.

(d) Trade policy

In the 1960s, GATT accords concluded by the European Community encouraged massive duty-free imports of much-needed protein crops from third countries, especially the US. These arrangements were incorporated in the 1992 Blair House agreements of 1992, with no import duty adjustments, despite the fact that we no longer knew what to do with our cereal mountains. At the same time, a memorandum was concluded with the US limiting European Community aid to its oil-protein crops. In connection with my report, I would just like to point out that these agreements are now outdated and no longer reflect the challenges facing the world today, especially with regard to the environment and global warming, which require us to reconsider our options when it comes to production and consumption.

11.12.2017

OPINION OF THE COMMITTEE ON THE ENVIRONMENT, PUBLIC HEALTH AND FOOD SAFETY

for the Committee on Agriculture and Rural Development

on a European strategy for the promotion of protein crops – Encouraging the production of protein and leguminous plants in the European agriculture sector (2017/2116(INI))

Rapporteur: György Hölvényi

SUGGESTIONS

The Committee on the Environment, Public Health and Food Safety calls on the Committee on Agriculture and Rural Development, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

- A. whereas, historically, the European deficit in protein crops dates back to old international trade agreements, especially with the United States, which allowed the European Community to protect its cereal production but in return allowed duty-free imports of protein crops and oilseeds into the Union (General Agreement on Tariffs and Trade and the 1992 EU-US Blair House Agreement); whereas this was accompanied by significant progress in the efficiency of protein crop production in third countries, leading to a competitive disadvantage for EU farmers, for whom protein crop production is not sufficiently attractive from an economic point of view;
- B. whereas crops from Brazil, Argentina and the United States are not subject to the same environmental, health, regulatory and GMO-related constraints as European crops;
- C. whereas legal certainty and the stability and coherence of European public policies are an essential part of any credible long-term protein strategy;
- D. whereas in recent decades the Union has used three main levers to support the objective of European protein independence, namely voluntary coupled aid for protein and oilseed crops, EU biofuel policy and the conditionality of 30 % of direct support introduced by the last reform of the common agricultural policy (CAP) in relation to the implementation of greening measures, including the obligation to devote 5 % of arable land to ecological focus areas (EFAs) and the decision to allow nitrogen-fixing crops and catch crops;
- E. whereas, owing to the small share of protein crop cultivation in the EU, the number of

vegetable protein research programmes is falling, matched by a decline in training, innovation and the acquisition of practical experience in the EU; whereas a research policy is only likely to succeed if it is backed by medium- to long-term political commitments;

1. Recalls that the Union devotes only 3 % of its arable land to protein crops and imports approximately 70 % of its protein-rich animal feed – mainly from Brazil, Argentina and the United States – which largely consists of GMO crops; stresses that the promotion of protein crop cultivation is necessary in order to reduce the EU's import dependency and the carbon and environmental footprint of farming;
2. Believes that the promotion of protein crop cultivation, as part of crop rotation, can also be a powerful tool in the transition towards more sustainable agri-food systems, supporting a shift from input-intensive monocultures with a high input of synthetic chemical products and high environmental impact, towards diversified agro-ecological systems, and can help to re-establish a favourable environment and increase pollinator dietary sources, which are an essential part of biodiversity;
3. Stresses that the availability of statistics concerning knowledge of protein crop cultivation and trade, together with consumer preferences in this regard, as well as farmers' initiatives for the cultivation of protein crops and their impact on the environment, health and nutrition, are essential for the launching, development, implementation and monitoring of a European protein crop promotion strategy;
4. Highlights the fact that protein crops include not only soya, but also grain and forage legumes, which can be grown in a diverse range of agro-climatic and soil conditions across Europe; notes that protein crops are used for food, in animal feed and as fuel; considers it important to promote the conservation and cultivation of indigenous varieties;
5. Recalls that the BSE crisis in the 1990s and the ban on using processed animal proteins in animal feed, as established in Regulation (EC) No 999/2001, has increased demand for plant-based protein in Europe; notes that alternative European protein feed sources, such as fishmeal, are used in the European fish farming sector;
6. Believes that conditions should be created for the development of a viable and sustainable domestic protein supply in the EU, which would not only bring economic benefits for farmers and producers of animal feed and food for consumers, but also a wide range of environmental and climatic benefits, such as the ability to fix nitrogen from the atmosphere, reducing both CO₂ emissions stemming from the production of synthetic chemical fertilisers, which is highly energy-consuming, and nitrous dioxide emissions occurring during the cultivation of leguminous protein crops, improving soil quality and water resource management, reducing disease levels resulting from continued monocropping, and protecting biodiversity; notes, furthermore, that combining cereals and protein crops on the same parcel – a common approach in organic farming – has proven to be useful and should not be marginalised;
7. Highlights that in crop rotation systems that include leguminous crops, the reproductive cycles of pests and pathogens are interrupted, thus reducing plant disease levels; notes, in addition, that biodiversity is also increased through the breaking up of monocultures;

8. Notes that leguminous crops attract pollinators, but that insecticides used on these crops may be fatal to pollinators;
9. Recalls that some 75 % of soybeans are used as feed for animals and that GM soybean is planted on over 90 million hectares worldwide – 82 % of the total surface for soy cultivation; recalls that in the US, the percentage of genetically engineered (GE) soybean is well over 90 %;
10. Recalls that the EU relies on massive imports of protein-rich feed materials, for the most part GM herbicide-tolerant soya, which is not desirable;
11. Stresses that overdependence on soy imports from the Americas, which are not subject to the same environmental health and regulatory standards as European crops, combined with increased soy protein demand from China, places Europe's security of supply in a vulnerable position, particularly in the context of growing demand due to an increasing global population and rising meat consumption;
12. Highlights that these imports entail a significant carbon footprint and give rise to serious environmental problems in source countries, such as deforestation, loss of biodiversity, ecosystem degradation, ecotoxicological effects, including on non-target species, and damage to the health of local workers, as well as a negative impact on land use in the areas in which soy is produced;
13. Notes that the majority of GM soy imported into the EU has been made tolerant to one or more herbicides such as glyphosate, which are consequently present as residues in the imported food and feed;
14. Stresses that the EU would benefit from the large-scale production of protein crops by reducing its deficit in plant protein; recognises the significant obstacles arising from the relatively low yields of suitable legumes and their weak price competitiveness in relation to imported products;
15. Notes that cows and other ruminants have co-evolved with beneficial bacteria which convert grass and other vegetation into a protein-rich food source; stresses, therefore, that it is not desirable, from an environmental, health or economic perspective, to feed these animals with imported soya which has been transported long distances, given that local sources of feed could be used;
16. Notes that the shift away from ruminants feeding on forage, to feeding on imported soya and maize, has led to the destruction of rainforests, permanent grasslands, meadows and pasture, resulting in a devastating loss of biodiversity and a loss of carbon due to land use change;
17. Believes that in order to reduce dependency on imported soya, which is predominantly used for animal feed, pasture-based feeding in Europe should be encouraged and incentivised;
18. Notes that, in addition to pasture-based feeding, other grazing or foraging alternatives are also available on temporary grassland, such as grass-clover mixes and undersowing with leguminous crops, such as vetch, lupins and grain legumes such as alfalfa;

19. Supports the objectives of the European Soya Declaration and other initiatives to boost non-GM soya production and other protein crop cultivation in Europe, provided that, in practice, they are implemented responsibly and respect the aims of developing sustainable, socially just and ecologically resilient agricultural systems;
20. Stresses the need to arouse farmers' interest in protein crop cultivation;
21. Notes that in order to incentivise farmers to grow protein crops, the activity must be financially viable;
22. Recalls that the CAP has a decisive impact on farmers' decisions to grow, or to abandon, protein crops, and should therefore be used to its full potential in the context of European sustainability goals, and in accordance with the various initiatives concerning protein and leguminous crop production taken at national level;
23. Notes that the introduction of a voluntary coupled payment for protein crops has contributed to increased production in the Member States that apply it and calls on the Member States to make full use of it;
24. Believes that the upcoming CAP should include a payment for leguminous protein crops and make better and more targeted use of protein crop-related tools, using incentives rather than punitive measures;
25. Believes that farmers should receive support for growing their own protein forage and having animals on pastures, as this would improve their self-sufficiency and lead to higher animal welfare standards;
26. Stresses that it is essential to create a level playing field for the production of leguminous protein crops in the Union and therefore ensure equal opportunities for farmers in all Member States;
27. Notes that, although the volume of protein crops grown in the EU is low at present, the Blair House Agreement remains in force; believes that the need for this agreement should be re-considered and notes, in addition, that there are WTO exemption clauses in place for socially and environmentally beneficial support measures;
28. Believes that once it has been in force for a few years, useful lessons could be learnt from the recent ban on the use of pesticides in EFAs;
29. Notes that the primary function of the ban on the use of pesticides in EFAs is to strengthen ecological processes by boosting biodiversity; notes, therefore, that the ban on pesticides in EFAs is in line with the legislative goals;
30. Recalls that the by-products of food and bio-fuel production and certain processed animal proteins represent important alternative sources of proteins for feed, and that their use should be promoted; stresses that biofuels form part of a circular economy when they are manufactured from by-products, waste or residues, take up a small proportion of farmland, are beneficial with regard to crop rotation and diversification and to making use of fallow land in accordance with the green measures under the CAP and do not, on their own, cause food prices to go up;

31. Highlights that legislation on processed animal protein is often outdated and should be made fit for purpose in order to create more room within the regulatory framework to facilitate the use of alternative protein sources, such as insect proteins;
32. Notes that the Commission's GLOBIOM study already incorporates the greenhouse gas benefits of co-production of animal feed with biofuels in the recommended indirect land use emission estimates;
33. Highlights that legumes are an important source of plant-based protein and therefore also play an important role in ensuring sustainable and healthy human diets; believes that the volume of high-quality, non-GM protein crops grown in the EU needs to be increased in order to satisfy growing consumer interest in, and demand for, plant-based diets;
34. Highlights the important role that dietary education can play in shaping food demands; stresses the need for the adoption of dietary guidelines at either EU or Member State level aimed at promoting a healthy diet while addressing the environmental concerns linked to food production;
35. Stresses that low global protein prices, challenging climate conditions, high input costs and competition from protein crops coming from outside Europe are all challenges that need to be addressed;
36. Notes that, in the face of climate change, independent scientific research on the stabilisation of yields and on stress resistance is particularly relevant;
37. Recalls that, in order to make protein crop cultivation more attractive to EU farmers, research should also focus on yield, protein and alkaloid levels and on the development of more sustainable cropping systems, in particular those based on protein crop rotation;
38. Stresses that existing structures, such as the Farm Advisory System (FAS) and the European Innovation Partnership, could provide advice and training for farmers on protein crop cultivation, including in the context of crop rotation;
39. Supports the establishment of transparent product labelling systems based on certified production standards, such as the Danube Soya and Europe Soya standards;
40. Calls for the extension of GMO labelling rules to cover products issued from animals that have mainly been fed with GM feed;
41. Notes that knowledge dissemination, the exchange of good practices and market development are also sorely in need of investment; emphasises the importance of local and regional knowledge of soils and suitable legume varieties;
42. Stresses the need for innovation and development in management practices and techniques to combat weeds, pests and other factors that could negatively impact crop yield and growth.

INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

Date adopted	7.12.2017
Result of final vote	+: 45 -: 1 0: 1
Members present for the final vote	Marco Affronte, Zoltán Balczó, Ivo Belet, Biljana Borzan, Paul Brannen, Soledad Cabezón Ruiz, Nessa Childers, Miriam Dalli, Angélique Delahaye, Stefan Eck, Bas Eickhout, Karl-Heinz Florenz, Gerben-Jan Gerbrandy, Arne Gericke, Jens Gieseke, Julie Girling, Sylvie Goddyn, Françoise Grossetête, Jytte Guteland, Karin Kadenbach, Urszula Krupa, Peter Liese, Norbert Lins, Susanne Melior, Rory Palmer, Piernicola Pedicini, Pavel Poc, John Procter, Julia Reid, Michèle Rivasi, Annie Schreijer-Pierik, Jadwiga Wiśniewska, Damiano Zoffoli
Substitutes present for the final vote	Jørn Dohrmann, Herbert Dorfmann, Luke Ming Flanagan, Martin Häusling, Krzysztof Hetman, Merja Kyllönen, Gesine Meissner, Nuno Melo, Ulrike Müller, Gabriele Preuß, Bart Staes, Claude Turmes
Substitutes under Rule 200(2) present for the final vote	Norbert Erdős, Sven Schulze

FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

45	+
ALDE	Gerben-Jan Gerbrandy, Gesine Meissner, Ulrike Müller
ECR	Jørn Dohrmann, Arne Gericke, Urszula Krupa, John Procter, Jadwiga Wiśniewska
EFDD	Piernicola Pedicini
ENF	Sylvie Goddyn
GUE/NGL	Stefan Eck, Luke Ming Flanagan, Merja Kyllönen
NI	Zoltán Balczó
PPE	Ivo Belet, Angélique Delahaye, Herbert Dorfmann, Norbert Erdős, Karl-Heinz Florenz, Jens Gieseke, Françoise Grossetête, Krzysztof Hetman, Peter Liese, Norbert Lins, Nuno Melo, Annie Schreijer-Pierik, Sven Schulze
S&D	Biljana Borzan, Paul Brannen, Soledad Cabezón Ruiz, Nessa Childers, Miriam Dalli, Jytte Guteland, Karin Kadenbach, Susanne Melior, Rory Palmer, Pavel Poc, Gabriele Preuß, Damiano Zoffoli
VERTS/ALE	Marco Affronte, Bas Eickhout, Martin Häusling, Michèle Rivasi, Bart Staes, Claude Turmes

1	-
EFDD	Julia Reid

1	0
ECR	Julie Girling

Key to symbols:

+ : in favour

- : against

0 : abstention

INFORMATION ON ADOPTION IN COMMITTEE RESPONSIBLE

Date adopted	20.3.2018
Result of final vote	+: 35 -: 1 0: 6
Members present for the final vote	John Stuart Agnew, Clara Eugenia Aguilera García, Eric Andrieu, José Bové, Daniel Buda, Nicola Caputo, Matt Carthy, Jacques Colmbier, Michel Dantin, Paolo De Castro, Jean-Paul Denanot, Albert Deß, Herbert Dorfmann, Norbert Erdős, Luke Ming Flanagan, Beata Gosiewska, Martin Häusling, Anja Hazekamp, Esther Herranz García, Jan Huitema, Peter Jahr, Ivan Jakovčić, Jarosław Kalinowski, Zbigniew Kuźmiuk, Norbert Lins, Philippe Loiseau, Mairead McGuinness, Ulrike Müller, Maria Noichl, Marijana Petir, Laurențiu Rebegea, Bronis Ropé, Ricardo Serrão Santos, Czesław Adam Siekierski, Marc Tarabella, Maria Gabriela Zoană
Substitutes present for the final vote	Paul Brannen, Stefan Eck, Julie Girling, Elsi Katainen, Anthea McIntyre, Annie Schreijer-Pierik, Thomas Waitz

FINAL VOTE BY ROLL CALL IN COMMITTEE RESPONSIBLE

35	+
ALDE	Jan Huitema, Ivan Jakovčić, Elsi Katainen, Ulrike Müller
ECR	Beata Gosiewska, Zbigniew Kuźmiuk, Anthea McIntyre
ENF	Jacques Colombier, Philippe Loiseau
GUE/NGL	Luke Ming Flanagan
NI	Laurențiu Rebeca
PPE	Daniel Buda, Michel Dantin, Albert Deß, Herbert Dorfmann, Norbert Erdős, Julie Girling, Esther Herranz García, Peter Jahr, Jarosław Kalinowski, Norbert Lins, Mairead McGuinness, Marijana Petir, Annie Schreijer-Pierik, Czesław Adam Siekierski
S&D	Clara Eugenia Aguilera García, Eric Andrieu, Paul Brannen, Nicola Caputo, Paolo De Castro, Jean-Paul Denanot, Maria Noichl, Ricardo Serrão Santos, Marc Tarabella, Maria Gabriela Zoană

1	-
EFDD	John Stuart Agnew

6	0
GUE/NGL	Matt Carthy, Stefan Eck, Anja Hazekamp
Verts/ALE	Martin Häusling, Bronis Ropé, Thomas Waitz

Key to symbols:

+ : in favour

- : against

0 : abstention