

## **PROFESSOR PETRAS VASINAUSKAS – THE FOUNDER OF THE SOIL CULTIVATION SYSTEM IN LITHUANIA**

Algirdas MOTUZAS<sup>1</sup>, Veronika VASILIAUSKIENĖ<sup>2</sup>

<sup>1</sup>Lithuanian University of Agriculture

Akademija, Kaunas district

E-mail: tempus@nora.lzuu.lt

<sup>2</sup>Lithuanian Academy of Sciences

Vilnius, Gedimino pr. 3

E-mail: v.vasiliauskiene@ktl.mii.lt

### **Abstract**

The paper analyses the scientific heritage of Petras Vasinauskas (14. 12. 1906 – 01. 10. 1995), the renowned agronomist, researcher, educator and public man, professor, doctor habilitatus, corresponding member of the Academy of Sciences of Lithuania, the head of the Department of Soil and Cop Management of the Lithuanian University of Agriculture, who headed the Lithuanian Institute of Agriculture for many years and was employed there as a research worker. He organised and set up Lithuanian Institute of Agriculture's branch offices and experimental stations, refined research topics, maintained very close ties with agricultural practitioners, trained undergraduate and PhD students. P. Vasinauskas considered land and soil taming, soil tillage, crop rotations, weed control, optimal farm size and its management, production specialisation and concentration as the chief means to promote agricultural progress and to increase crop productivity. The professor worked most intensively during the 1955-1975 period when he was director of the Lithuanian Institute of Agriculture and a research worker. In 12 branches of agronomy science he published in total over 650 books and other publications.

Key words: history of agricultural science, sciencemetry, agronomy, soil tillage, soil and crop management, field cropping.

### **Introduction**

This year professor P. Vainauskas would have turned 100 (born in Pasvalys on December 14 1906 in Pasvalys – died on October 1 1995 in the settlement of LUA, Kaunas district). In our country's history of agronomy prof. P. Vasinauskas is referred to as the founder of crop and soil management science and the Lithuanian soil tillage systems, initiator of minimal soil tillage and creator of its theory, distinguished organiser of agricultural science, longevous educator of agricultural specialists and research workers, author of a vast scientific and publicistic heritage. Few researchers win such recognition. Still in his lifetime he was presented in several encyclopaedic books and after his death his scientific, pedagogical and social activities were studied and described in the monograph "Profesorius Petras Vasinauskas" (compiler A. Motuzas, 1998) and in separate articles /Stancevičius, Kadžiulis, 1996/.

## **Experimental methods**

The scientific heritage of P. Vasinauskas was assessed by the method of scientometry analysis, whose results are presented in graphs.

## **Results and discussion**

P. Vasinauskas was a typical student of the Academy of Agriculture in Dotnuva of the last century's between the war period who was granted the title of a diploma-holding agronomist after 17.5 years from the start of his studies (1925). Having done the course, he worked as a teacher in the Anykščiai elementary school's agricultural class and did his compulsory practice in the estate (called Naujadvaris, near Klaipėda) of the first doctor of agronomy science in Lithuania count Vladimiras Zubovas, then again worked as a teacher in Žemaitija, until he was employed as an agronomist in the Chamber of Agriculture. He was one of the organisers of the Suvalkija peasants' strikes during the years of economic crisis, and in 1940 after the first soviet invasion he was appointed director of the Chamber of Agriculture. After the closure of the Chamber, he became the head of the Agricultural Board of the Agricultural Commissariat.

Important moments in Prof. P. Vasinauskas scientific and pedagogical activities:

1941 – beginning of scientific work at the Joniškėlis Experimental Station,

1943 – diploma-holding agronomist,

1945 – beginning of pedagogical work at a higher-education school, for the first time appointed head of LAA's Department of Soil and Crop management; docent, with intervals headed the Department for about 16 years,

1945 – appointed director of the Dotnuva Experimental Station and was in charge of it for 8 years,

1951 – gained a degree of agricultural sciences candidate (doctor) for his dissertation "Soil tillage methods according to the data of the Dotnuva Experimental Station from the 1924-1950 period",

1956 – appointed director of the Lithuanian Institute of Agriculture, was in charge of the Institute for about 9 years, afterwards was in charge of the Arable Farming Department for about 4 years and was employed at the Institute as a research worker until 1992,

1956 – elected corresponding member of the Lithuanian Academy of Sciences,

1960 – received the title of honoured agronomist,

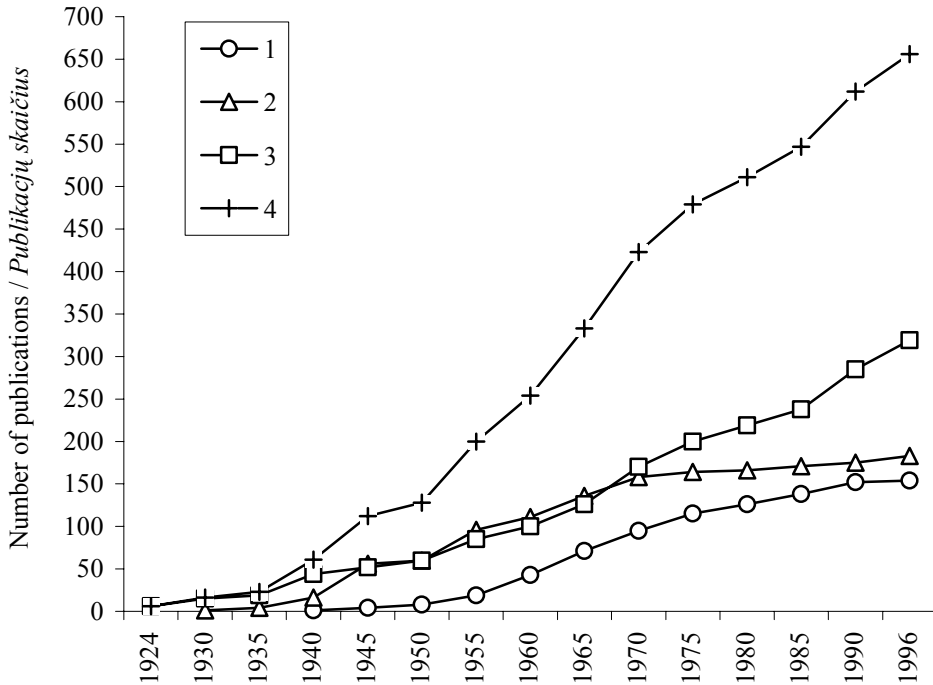
1973 – gained a doctor's degree (doctor habilitatus) of agricultural sciences for the dissertation "Development of crop and soil management fundamentals and organisation of arable farming in Lithuania",

1973 – professor,

1976 – honoured science worker.

When P. Vasinauskas started working as an assistant at the Joniškėlis Experimental Station at the beginning of Nazi occupation, he had already won fame by his numerous publications in the periodical press: 16 articles on the issues of agronomic practice and 44 articles on the issues of general agricultural policy. This is testified by the cumulative curves of the number of his publications (Fig. 1). In Joniškėlis he gathered data and in 1943 defended a diploma paper "Harrowing experiments in rye crops", published over 40 articles mostly in "Ūkininko patarėjas" ("Farmer's Advisor")

on the issues of soil and crop management in which he provided recommendations based on the findings of the field trials: “<...> with deepening of the ploughlayer the so called “soil water economy” can be better managed. <...> whereas only in well-managed estates soils are ploughed at up to 12 inch (30 cm) depth, and the soils of ordinary farmers are hardly ploughed deeper than 8 inches (20 cm). Very often the ploughing depth up to 6 inches (15 cm), which is called shallow ploughing in Germany, is considered deep ploughing in our country” [5].



1 – scientific / mokslinių, 2 – methodological / metodinių, 3 – general agricultural policy / bendrosios žemės ūkio politikos, 4 – in total / iš viso.

**Figure 1.** Cumulative curves of the number of Prof. P. Vasinauskas publications during 1924-1996

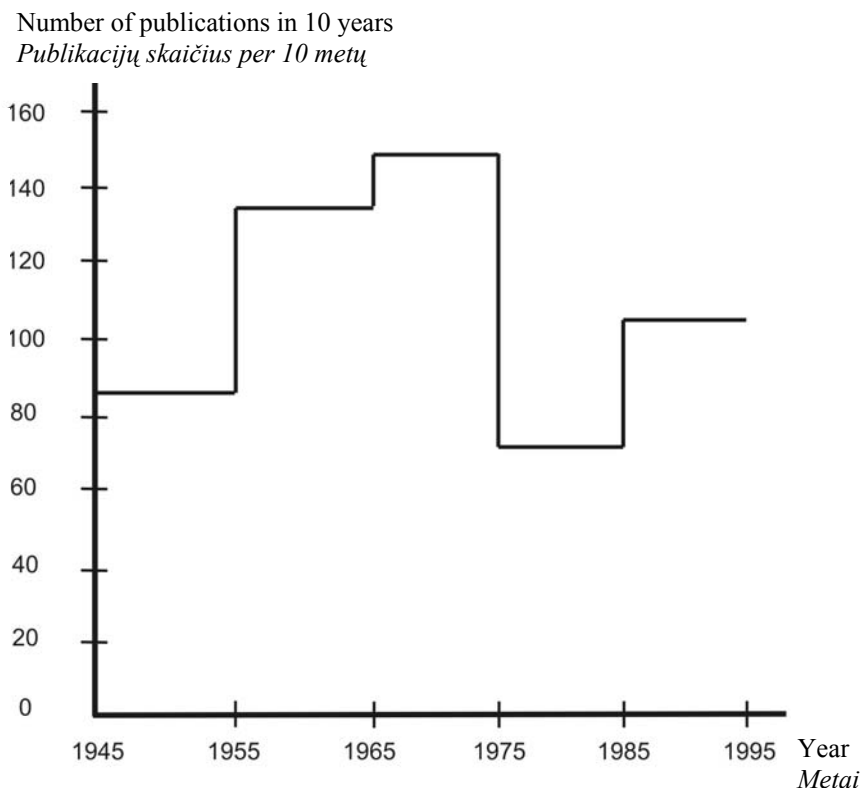
**1 paveikslas.** Prof. P. Vasinausko publikacijų skaičiaus 1924-1996 m. kumuliacinės kreivės

The year 1945 should be considered as the beginning of full-fledged scientific activities of P. Vasinauskas, when he became director of the Dotnuva Experimental Station, head of the Crop Production Subdivision of the Lithuanian Academy of Sciences’ Institute of Agriculture and head of the Lithuanian Academy of Agriculture’s (LAA) Soil and Crop Management Department. During the five years in cooperation with his colleagues he achieved so much that in his dissertation written in 1950 to gain the degree of candidate (doctor) of agricultural sciences he publicly contradicted Russia’s academician V. Williams concerning the theoretical statements about the

grassland farming system universally acknowledged in the Soviet Union at that time. In his dissertation's section five "Summarising of the results of some soil tillage experiments" chapter "Why some of the measures recommended by V.R. Williams are not applicable for the conditions of the Lithuanian SSR" P. Vasinauskas wrote: "*<...> in our wet climate conditions medium heavy soils are most often characterised by poor physical properties. Using the currently known soil and crop management and fertilization practices, perennial grasses do not secure a complete restoration of stable structure. The soil in whose mass loose mechanical elements or water unstable crumbs dominate, do not have the properties of a structural soil. This leads to the conclusion that for tillage of such soil one cannot blindly apply the methods that are indicated in the theory of most advanced grassland farming system*" /Vasinauskas, 1950/. Even in the case of "afflatus" when V. Williams's theory was started to be criticised, during the period of stalinistic regime to discuss the ideas disseminated by Moscow could only a very courageous and public-spirited man, undoubtedly bright personality, whose steps at that time and later were called resistance to "strange winds" and dogmatism by prof. L. Kadžiulis /Profesorius Petras Vasinauskas, 1998/.

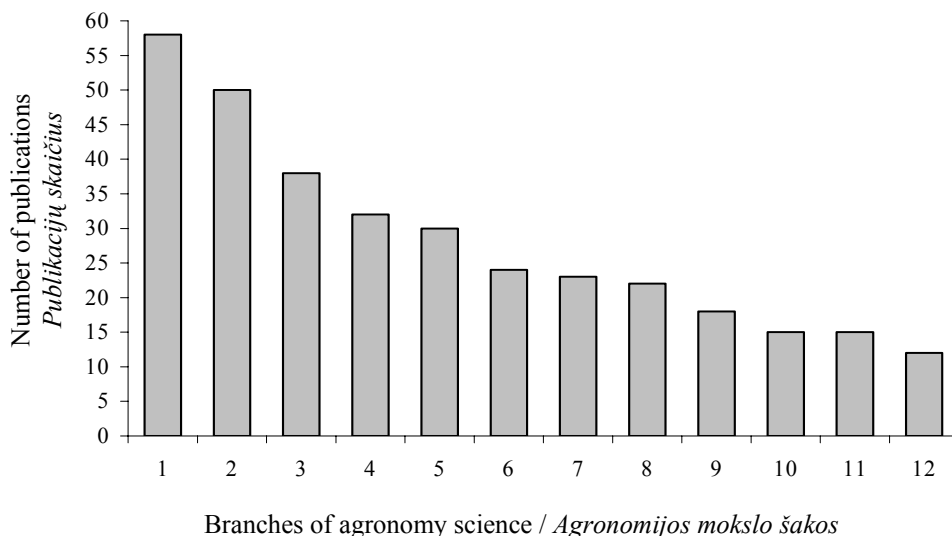
It is only natural that while discussing in his dissertation P. Vasinauskas uses some reservation and concludes it with reference to subsequent tests: "*<...> believing the theory of Williams we cannot raise any other assumption than the one suggesting that in our soils there no two horizons in terms of structure. Today we are not able to explain whether there are no two different horizons due to the fact that in general our soils are characterised by low structurality, or whether to the fact that various reasons – mechanical, physico-chemical and biological during one growing season damage the structure of soil horizon deeper than 10 cm, or finally due to the fact that in the lower horizon the structure does not improve sufficiently during one growing season. <...> Organic residues, whose content in the topsoil horizon layer is always higher, placed on the furrow bottom by a stubble breaker, stay unbroken for a longer time, plants experience nutrient shortage and the yield goes down. The practical experiences indicated here and assumptions made from them about the soil processes have to be validated by respective soil tests. <...> The field experiments conducted at the Dotnuva Experimental Station revealed a whole number of soil tillage methods that are suitable on medium heavy soils that are not characterised by a stable crumb structure. Further experiments should be designed to continue this work*". And he did so by trying to check and validate in Lithuania and only then to accept or reject the ideas of agronomy science thrust on by others and bearing in his mind the ambition to develop the national farming (cropping) system. In 1949, with this end in view, working as the head of the Lithuanian Academy of Agriculture's Department of Soil and Crop Management he started extensive experiments on the comparison of different crop rotations in the training farm, at the Dotnuva Experimental Station initiated the setting up of the first Soil Agrophysics Laboratory in Lithuania, in 1953 designed experiments on plough-layer's deepening and taming, and in 1956 experiments on different ploughing depth. He summarised the experimental results in the monograph "Soil tillage" issued twice in 1952 and 1956. The section "The issues of choice of soil tillage implements and soil tillage simplification" published in the second edition enabled the assessors of P. Vasinauskas scientific heritage to consider him and the Dotnuva Experimental Station

as the initiators of minimal soil tillage and creators of its theory in Lithuania. They think that P. Vasinauskas, who presented in his books and publications a complete pre-sowing and post-sowing soil tillage system for winter and spring crops with theoretically validated technologies, possible deviations from the general scheme, really deserves the title of the founder of the Lithuanian soil tillage system.



**Figure 2.** The publicistic activity of Prof. P. Vasinauskas during the 1945-1995 period  
*2 paveikslas. Prof. P. Vasinausko publicistinis aktyvumas 1945-1995 metais*

It is natural that the most intensive and productive period of scientific work in P. Vasinauskas life coincided with the period when he headed the Lithuanian Institute of Agriculture (LIA) during 1956-1965 (Fig. 2). Over this period he published 137 publications of which 52 were scientific, 40 methodological (recommendatory) and 45 on general agricultural policy. Most of his publications of that period were focused on crop rotations (38), soil tillage (50) and crop cultivation technologies (58) (Fig. 3). P. Vasinauskas saw crop rotations on each farm as a combination of soil and crop management, economics and land management, which had to be determined by crop alternation, crop structure and arrangement of crop fields. Together with his colleagues he suggested that on Lithuania's plains one crop rotation field can be up to 25 ha in size, and on hills up to 5 ha /Vasinauskas, 1967/.



1 – crop cultivation technologies, 2 – soil tillage, 3 – crop rotations, 4 – grassland husbandry, 5 – field cultivation management, 6 – soil science and plant nutrition, 7 – land-reclamation, 8 – herbology, 9 – seed production, 10 – forage production, 11 – agricultural co-operation, 12 – higher education in agronomy.

1 – augalų auginimo technologijos, 2 – žemės dirbimas, 3 – sėjomainos, 4 – žolininkystė, 5 – laukininkystės organizavimas, 6 – dirvotyra ir agrochemija, 7 – agromelioracija, 8 – herbologija, 9 – sėklininkystė, 10 – pašarininkystė, 11 – ž. ū. kooperacija, 12 – aukštosios agronomijos studijos.

**Figure 3.** The number of scientific and methodological publications in twelve branches of agronomy science published by prof. P. Vasinauskas during 1931-1995

**3 paveikslas.** Prof. P. Vasinausko mokslinių ir metodinių publikacijų, paskelbtų 1931-1995 m. dvylikoje agronomijos mokslo šakų, skaičius

Another act which is related to his being the head of the Institute is a public P. Vasinauskas and his colleagues' resistance against the application of the so called row crop farming system obtruded by the soviet government which might have been applicable for the distinct continental climate conditions. The one-party dictate demanded to replace the purportedly extensive land use for swards (grasslands, pastures, field crop rotations for perennial grasses) by intensive land use for row crops (maize, fodder beet). The researchers of the Institute stated their opinion on this issue in the "Collective outgiving of the Lithuanian Institute of Agriculture's research workers concerning grassland farming system and increasing of grain production in the Republic" signed on November 14 1961 and posted to party and agricultural authorities in Vilnius. The letter said: "<...> On every occasion we speak for the improvement of poor grasslands. Every time we suggest taming grasslands, as well as ploughing of unproductive clover fields, unbroken soil etc. but we think that the area under grasslands should be preserved in the Republic and that the relative weight of forage

*produced on grasslands should be on a steady increase in the total forage balance. We have to be constantly concerned about the creation of steady forage production since livestock production farms perform best in our Republic and our climate conditions are best suited for forage production and furthermore, that our soil fertility is best increased by applying farmyard manure at high rates and frequently. There is little manure because of the low numbers of livestock and there are low numbers of livestock because of the shortage of forage. Forage, the cheapest forage, the most easily produced forage and forage that we need at the largest quantities is produced by grasslands (meadows, pastures and clover fields). Thus good, productive grasslands are a necessity for us. <...>".* Repressions started after this letter: public considerations, condemnation in the press, sacking. The director P. Vasinauskas asked to be dismissed but his application was turned down by the party authorities of the Republic. Although they had some trouble in Moscow because of this letter, the party authorities highly valued the director and treated him honourably and called him "agriculturalist number one".

We see that grassland affairs in the country were another concern of P. Vasinauskas for the solution of which he devoted 32 publications. Already in 1953 at the Dotnuva Experimental Station with his co-workers he started research on clover undersowing, later he encouraged alfalfa cultivation and was the supporter of cultivated pastures in farm land use. He published the news on agricultural crops cultivation technologies in the four new issues of his book "Agrotechnika" /Vasinauskas/. He considered soil taming, whose operations should be carried out in a complex way, as the basis for these technologies. In as many as 23 articles P. Vasinauskas indicated the ways to tame Lithuania's soil. These include a two-way moisture adjustment in the soil – drainage and irrigation, removal of shrubs and stones, ploughlayer's thickening, soil surface levelling, acid soils liming, weed control, soil fertilization. The words of P. Vasinauskas that "to gain benefits from land reclamation, the soil has to be immediately tamed and advanced technologies should be used" are still relevant /Vasinauskas, 1965/.

We cannot help remembering the role of prof. P. Vasinauskas as organiser of agricultural science in the country. Nowadays we would call him a science manager who was able to perfectly combine the branches of agronomy science into one system of soil and crop management, who managed to look through and appraise the reports of the Institute researchers on time, and who was willing to relate their subjects and results and to coordinate with the works of other institutions in Lithuania and abroad. Professor was an uncompromising supporter of science and production unity, according to dr. A. Būdvytis, who took over the head position from him, P. Vasinauskas did everything for the sake of concord between science and practice. The Institute has preserved the planning principles of research work at the Lithuanian Institute of Agriculture written by P. Vasinauskas /Vasinauskas, 1986/ in which he suggested that research should be organised in the Republic according to the peculiarities of prevalent soils and the most common and promising crops for those soils. To implement this, the headquarters of the Institute was set up in the present Akademija (near Dotnuva, Kėdainiai district), as well as three experimental stations – Perloja (Varėna distr.), former Dūkštas (Ignalina r.) and the present Kaltinėnai (former Varniai, Šilalė distr.) and several experimental farms. P. Vasinauskas had a strong opinion but tried not to thrust it on anyone and expressed

it in frequent scientific discussions organised by him which were characterised by openness and diversity of opinions. P. Vasinauskas wrote: *“There must be a live idea in research institutes. Alive, not marinated! Solutions must be principled and original. Anyone doing research work seeks to find something new and persistent”* /Vasinauskas, 1986/.

In 1965 after he had left the position of director of the Institute, he was appointed head of Arable Farming Organisation Department. In this way he expanded and deepened another very important field of his research interests – planning of organisational management of agriculture, which evolved from his research on organisation of arable farming. A rational production unit size for Central Lithuania’s plains (500 ha, about 400 ha of agricultural land, about 300 ha arable land) was presented by P. Vasinauskas in his doctor of science dissertation (habilitation work) defended at LAA’s Science Board in 1971. It is interesting to note, that it in its essence it was similar to the present habilitation: a report on completed and published research works was submitted and a presentation was made, which included 6 sections: 1) Preparation of soil tillage system, 2) Sowing and crop management, 3) Soil taming, 4) Structure of crop rotation and crop area, 5) Organisation of arable farming production, 6) Management and organisation of arable farming. In the last section he defended the opinion that while developing regional planning schemes one should consider the so called “production factor” as the basis, i.e. solve the issues of planning of agricultural enterprises and organisation of production and labour with a view to creating the most favourable conditions for the development of agricultural production, reducing of production costs and increasing of labour productivity. According to so developed regional schemes agricultural producers had to live where they work. Such opinion of P. Vasinauskas clashed with the opinion thrust on by Moscow and local authorities about the so called cultural-utility factor: to amalgamate farm units and to design large settlements. There were fears that Moscow might not approve the second dissertation of P. Vasinauskas. It took two years to approve the dissertation but since 1972 the Republic’s party authorities had forbidden him and his followers from publicly stating their opinion for brigade, against amalgamated, centralised, branch-type management system. He published over 30 articles on the issues of arable farming organisation and rural development strategy. On August 12 1972 P. Vasinauskas wrote in his diary: *“Instability in agriculture is a knife put to your throat. Only due to the instability, disorder, distrust of tomorrow people are fleeing the rural areas. Not only the youth but also old agriculturalists.”* His own and soviet government’s opinions clashed again.

He always felt great responsibility for his motherland and the fate of its people. At the sunset of his life, which coincided with the beginning of the land reform in the first years after the restoration of Independence, P. Vasinauskas produced numerous publications (Fig. 2). He suggested setting up farms having not less than 30-50 ha and not more than 500 ha of agricultural land. He suggested the following measures for the restoration of depressed agricultural production: „<...> *The first measure – to supply agriculture with cheap credit. Credit sources – interstate foreign capital, foreign Lithuanians’ capital. <...> Finally, cooperative capital could assist with favourable credit<...> Another measure to increase the current agricultural production is co-operation. The third measure is to adjust export of agricultural produce”* /Vasinauskas,



1994/. He not only wrote about cooperation but also set up initiative groups to restore it, on September 31 1994 he delivered a lecture on cooperation at the Institute. P. Vasinauskas published 15 articles on the issues of cooperation. But the new authorities did not read and hear the old man. The ways of the professor and authorities diverged...

P. Vasinauskas trained and educated students at the Lithuanian Academy of Agriculture for over 30 years, worked as a docent for 17 years, as professor for 13 years (this scientific title was granted to him in 1973), almost all this time he headed the Department of Soil and Crop Management, for two years (1956-1958) he was prorector for science. While estimating his colleague's pedagogical activities, Prof. A. Stancevičius, wrote: "*P. Vasinauskas' lectures on soil and crop management were distinguished for single-mindedness, matter-of-factness and consistency. He devoted a great attention to practical training of students <...> for this purpose he developed an original methodology for practical training, based on the unity of theoretical and practical training. While heading the Department, he created favourable conditions for lecturers to maintain tight links with farms*" /Profesorius Petras Vasinauskas, 1998/. His work with postgraduate students (doctoral students) can be attributed to his pedagogical activities: he educated 20 candidates (doctors) of agricultural sciences of whom 6 became professors. He demanded the young scientists to be independent, principled, and responsible for the published results and ideas. He followed more than one of his students from the beginning of postgraduate (doctoral) studies to habilitation, took pleasure in their works and presented many of their research work results in his monographs /Vasinauskas,1989/. In April 2006 in order to perpetuate his pedagogical work the Senate of the Lithuanian University of Agriculture decided to name one of the auditorium's of the Department of Agronomy after him.

The manuscripts of P. Vasinauskas six unpublished books are stored at the libraries of the Lithuanian Institute of Agriculture and the Lithuanian University of Agriculture. The currently most relevant one is "Agropolitika" ("Agricultural Policy"). Thinking about the future of agriculture in Lithuania he wrote that on the lands of plains there will be large and rich cooperatives managed by farmers who will put their land and assets together. On hilly and laky lands there will be smaller cooperatives involved in agrotourism. "There is no doubt that in the future we "will capitalise on tourism" wrote P. Vasinauskas. In the same issue he was categorically against share holding companies, as the manifestation of the old capitalism with the worst its sign-growth of the rich. If this manuscript had been published and if it had been read by the agricultural authorities of Independent Lithuania, there might have not emerged the current landlords, whose demesne is called by prof. A. Stancevičius by its true name latifundia.

In 2005 we published P. Vasinauskas' part of the large manuscript presented by several authors "Agronomy in Lithuania" /Vasinauskas, 2005/. In the same book after the overview of Lithuania's agriculture during 1918-1990 and his own service in the system of Chamber of Agriculture, professor was the first to have described so comprehensively the state of practical agronomy during the soviet period. It contains short biographic essays of 82 most outstanding Lithuanian agronomists, starting with the first scientific agronomist M. Katkus, remembering the first agronomist who defended doctoral dissertation, count V. Zubovas, the President of the Republic of Lithuania

A. Stulginskis, prime minister J. Tūbelis, ministers J. Aleksas, J. Krikščiūnas, and other public men, professors, scientists, and finishing with the owners of model fields.

The time that elapsed after the publication of this issue shows that by not including the parts of the manuscript written by other authors, which occurred due to the limited funds, its authentic title does not precisely reflect its new contents.

The famous diary of prof. P. Vasinauskas, written during the 1952-1995 period, is still waiting for a publisher. His notebooks contain not only personal experiences, joys and failures but also concern about the beauty of his homeland and the lives of its people, establishment of the Horse Museum, foundation of the branch office of the Lithuanian Academy of Agriculture's Department of Agricultural Engineering in Joniškėlis and many other things. From today's viewpoint, the comprehensive activities of the professor can be in short described by a rural development term.

This summarised discussion of prof. P. Vasinauskas life, scientific and social activities raises the idea that the creative heritage of this outstanding person is waiting for a detailed analysis of several narrower agronomic issues, studied by him, which may undoubtedly be beneficial for the contemporary agricultural policy and science.

### **Conclusions**

1. Professor P. Vasinauskas' scientific heritage consists of over 650 publications, including 154 research publications, 183 methodological (recommendations) publications, 320 general publications on agricultural policy issues. The greatest number of his scientific publications are devoted to crop cultivation technologies – 58, soil tillage – 50, crop rotations – 38, grassland husbandry – 32, organisation of arable farming – 30.

2. The most creative period in prof. P. Vasinauskas' life was 1955-1975 when he worked as director of the Lithuanian Institute of Agriculture, head of Arable Farming Organisation Department and a research worker. During this period he published about 275 publications, 100 of which were scientific.

3. Upon restoration of Lithuania's Independence, prof. P. Vasinauskas' publicistic activity increased one and a half times: from 68 articles during 1975-1985 to 106 articles during 1985-1995.

4. Analysis of prof. P. Vasinauskas scientific heritage enables us to maintain that he is justly entitled as the founder of Lithuanian agricultural science and soil tillage system, initiator of minimal soil tillage and creator of its theory, renowned organizer of agricultural science, longevous educator of agricultural specialists and research workers.

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### **REFERENCES**

1. Profesorius Petras Vasinauskas / Sudarytojas A. Motuzas. - Vilnius, 1998. - 262 p.
2. Stancevičius A., Kadžiulis L. Profesorius Petras Vasinauskas – žemdirbystės mokslo puoselėtojas // Žemės ūkio mokslai. - 1996, Nr. 3, p. 12-18
3. Vasinauskas P. Agronomija Lietuvoje / Sudarytojai A. Motuzas, V. Vasiliauskienė / LMA, LŽI, LŽŪU. - Akademija, 2005. - 161 p.

4. Vasinauskas P. Agrotechnika. - Vilnius, 1971, 4-asis leid.- 411 p. (Ankst. leid.: 1966, 1957, 1947)
5. Vasinauskas P. Ar visada naudinga giliai arti? // Ūkininko patarėjas. - 1942 rugs. 18, p. 4
6. Vasinauskas P. Bendroji agrotechnika. - Vilnius, 1989. - 232 p.
7. Vasinauskas P. Drenuotų plotų žemdirbystės kultūra // Žemės ūkis. - 1965, Nr. 9, p. 2-7
8. Vasinauskas P., Klimavičiūtė R. Sėjomainos. - Vilnius, 1967. - 312 p.
9. Vasinauskas P. Lietuvos žemės ūkio mokslų raida. - Vilnius, 1986. - 119 p.
10. Vasinauskas P. Stiprus ūkininkas // Valstiečių laikraštis. - 1994, spal. 29, p.2
11. Vasinauskas P. Žemės dirbimo būdai pagal Dotnuvos bandymų stoties 1924-1950 metų duomenis: disertacija žemės ūkio mokslų kandidato laipsniui įgyti. - Dotnuva, 1950. - 246 p.

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## **PROFESORIUS PETRAS VASINAUSKAS – ŽEMDIRBYSTĖS MOKSLINIŲ PAGRINDŲ KŪRĖJAS LIETUVOJE**

A. Motuzas, V. Vasiliauskienė

### **S a n t r a u k a**

Straipsnyje analizuojamas žymaus agronomo, mokslininko, pedagogo ir visuomenės veikėjo profesoriaus, habilituoto daktaro, Lietuvos MA nario korespondento Petro Vasinausko (1906 12 14 - 1995 10 01), ilgus metus dirbusio Lietuvos žemdirbystės instituto direktoriumi, mokslo darbuotoju, Lietuvos žemės ūkio akademijos (universiteto) Žemdirbystės katedros vedėju, mokslinis palikimas.

Jis organizavo ir steigė Lietuvos žemdirbystės instituto filialus ir bandymų stotis, tobulino mokslinių tyrimų tematiką, labai artimai bendradarbiavo su žemės ūkio praktikais, rengė studentus ir doktorantus. Pagrindinėmis priemonėmis skatinti žemės ūkio pažangą ir didinti auginamų augalų derlių P. Vasinauskas laikė žemės ir dirvožemio kultūrinimą, žemės dirbimą, sėjomainas, piktžolių naikinimą, optimalų ūkio dydį ir jo valdymą, gamybos specializaciją ir koncentraciją. Intensyviausiai profesorius dirbo 1955-1975 m., kai jis buvo Lietuvos žemdirbystės instituto direktorius ir mokslo darbuotojas. Agronomijos mokslo 12-oje šakų iš viso jis parašė daugiau kaip 650 knygų ir kitų publikacijų.

Reikšminiai žodžiai: žemės ūkio mokslo istorija, mokslometrija, agronomija, žemdirbystė, agrotechnika, laukininkystė.