

The National Agricultural Research and Innovation Center (NARIC), HUNGARY

The Goal of the Government

Establishment of an integrated, single legal entity from the fragmented and ill-proportioned sectoral governmental RDI capacities, "where the institutes keep their professional autonomy as separate organizational units and their financial management is carried out on a high level of independence." (1467 (VII. 24.) Korm. hat.)

Preambulum

- The National Agricultural Research and Innovation Center (NARIC) is an unexampled organisation of agricultural research in Hungary
- The research units of this sector have never belonged to one organisation. So far there was no precedent for such a well organised share of research goals, than in the framwork of NARIC established on the 1st of January, 2014
- Because of its size (appr. 1250 people) by now it can join to the international scientific platform as a considerable sized institution and this way increasing the recognition of Hungarian agricultural research.

Main tasks of NARIC

- Increasing the competitivness of the Hungarian agriculture
- Establish and complete practice-oriented R&D and innovation programs to support the sustainable development

Basic distinction from the previous financing model:

Institute funding gives place to project funding

The yearly budget of an institute exclusively depends on the number of projects and their funding – most often the support won by tender.

At the moment there are **192 research projects** in 11 independendt research units at 27 premises.

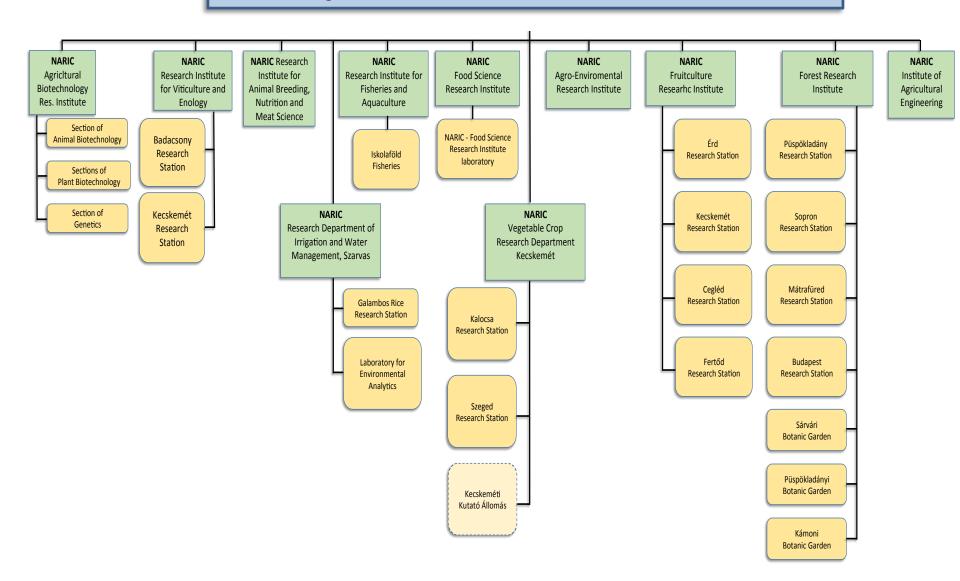
There are long-term (4-8 years) projects, as well.

Most important specialties of NARIC

- Fishery and aquaculture,
- Breeding of field crops, ornamental plants, fruits and vegetables,
- Viticulture and vinary research,
- Animal husbandry and breeding,
- Irrigation and water management,
- Agricultural machinery,
- Forestry research,
- Agricultural biotechnology,
- Food sciences,
- Agricultural environment research,
- All the connecting education and consulting activity

NARIC

National Agricutlrual Research and Innovation Center, General Directorate



R&D Companies under the ownership of NARIC

- Cereal Research Non-profit Ltd., Szeged
- Hungarian Dairy Research Intitute Ltd., Mosonmagyaróvár
- Hungarian Horticultural Propagation Material Non-profit Ltd., Nagytétény
- Vegetable Production Research Institute Ltd., Kecskemét

Research institutes and stations • Gönc Sátoraljaújhely Szendrő of NARIC in Hungary Sárospatak Edelény Kazincbarcika Sajószentpéter Szikszó Borsodnádasd Demecser Vásárosnamény Ibrány • Nagyhalász Tokaj Rakamaz Salgótarián Fehérgyarmat Miskolc Balassagyarmat Pétervására Emőd Nyékládháza Bátonyterenye Mátészalka Tiszavasvári Tiszaújváros Nagyecsed Rétság Pásztó 6 Eger= Csenger Mezőkövesd Mezőcsát Újfehértó Nagykálló Esztergom Szob Nanymaros Mosonmagyaróvár ■ Gyöngyös Jánossomorja Sopron Fertőd Hajdúböszörmény Dorog Szentendre Dunakeszi Füzesabony Komárom Csorna Bábolna Győr Hajdúsámson Tiszafüred Balmazújváros Kapuvár Tatabánya Vámospéros Debrecen Pannonhalma Oroszlány Hajdúszoboszló Létavértes BUDAPEST Kunhegyes Nádudvar Répoelalo Derecske Gyál Vecsés Gyömrő Karcag Dunaharaszti Monor Celldömölk Újszász Püspökladány Kenderes Albertir sa Berettvóúifali Székesfehérvár Törökszentmiklós Szombathely Cegléd Gárdony Velence Ercsi Kisújszállás Abony Szolnok Turkeve Füzesgyarmat Biharkeresztes Körmend Vasvár Mezőtűr Dévaványa Komádi Nagykőrös 👈 Martfű Gyomaendrőd Szeghalom Lajosmizse Dunaúiváros 🛋 Tiszaföldvár Szentgotthárd Zalaszentgrót Zalalövő Dunavecse Szabadszállás Kunszentmárton Kecskemét Sárbogárd Zalaegerszeg Balatonielle Dunaföldvár Keszthely Békés Ízsák Balatonboglár Csongrád Simontornya Békéscsaba= Kiskunfélegyháza =Szentes Lenti Lengyeltóti Gyula Zalakaros Orosháza Kecel Mindszent Kiskunmajsa-Nagykanizsa Kistelek Hódmezővásárhely Mezőkovácsháza Letenye Tolna Dombóvár Kiskunhalas Mezőhegyes Kaposvár Szeged Szekszárd Csurgó Jánoshalma Sásd Tompa Mórahalom Nagyatád Baia Komló Bátaszék

Bácsalmás

Szigetvár

Barcs

Szentlőrinc Pécs

Harkány Siklós

Mohács =



NARIC Agricultural Biotechnology Institute



Agricultural Genomics and Bioinformatics Group

Endre Barta Group Leader

- Mangalica genome project
 - Collaboration: ABI, FRI and ARI + four Companies











NARIC Agricultural Biotechnology Institute



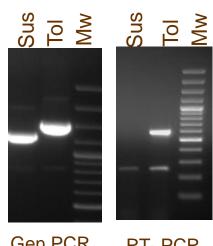
Fruit Genetics Group

Géza Dallmann **Group Leader**

Research Topic:

Identification the endogenous defense mechanism in apple against *Erwinia amylovora*. Developing molecular markers to distinguish fire blight tolerant and susceptible apple varieties.







Gen PCR

RT-PCR

climate – energetics – silviculture

Climate change

unfavourable effects ↓ adaptation ↑

Bioenergetics

increasing demand ↓ new resource ↑

Close to nature

diversity, function stability $\downarrow \uparrow$





NARIC AERI **Department of Ecotoxicology**

Research activities:



Agricultural Ecotoxicology:

- secondary effects of insect resistant transgenic plants (containing Cry toxins)
- aquatic toxicology (alga, insect, crustacea, snail, fish, amphibian)

- teratogenic effects of environmental contaminants
- hormone modulant effects of environmental contaminants

National Agricultural Research and Innovation Centre Research Department of Irrigation and Water Management

NARIC ÖVKI

H-5540 Szarvas, Anna-liget 8.

Fax.: +36 66 312 142

Tel.: +36 66 515 301

Excess Water Hazard Map based on more detailed influential factor maps (i.e. soil, relief, geology, groundwater, hydrometeorology, land use)

